Connecting via Winsock to STN

1/21/01-

(Part I)

Welcome to STN International! Enter x:x

LOGINID: SSSPTAAJP1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

Normane see

* * * * * * * * * * Welcome to STN International

NEWS Web Page URLs for STN Seminar Schedule - N. America NEWS "Ask CAS" for self-help around the clock New pricing for the Save Answers for SciFinder Wizard within NEWS SEP 01 STN Express with Discover! NEWS OCT 28 KOREAPAT now available on STN NEWS 5 NOV 30 PHAR reloaded with additional data NEWS 6 DEC 01 LISA now available on STN DEC 09 12 databases to be removed from STN on December 31, 2004 NEWS 7 NEWS 8 DEC 15 MEDLINE update schedule for December 2004 NEWS DEC 17 ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness NEWS alerts (SDIs) affected NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB NEWS 13 DEC 17 NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and February 2005 17 JAN 11 NEWS CA/CAPLUS - Expanded patent coverage to include Russia

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

(Federal Institute of Industrial Property)

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
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NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 18:24:05 ON 21 JAN 2005

=> fil reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 18:24:14 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0 DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

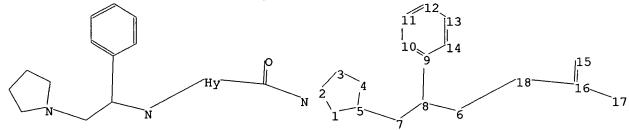
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>

Uploading C:\Program Files\Stnexp\Queries\10699106b.str



chain nodes :

6 7 8 15 16 17 18

ring nodes:

1 2 3 4 5 9 10 11 12 13 14

chain bonds :

5-7 6-8 6-18 7-8 8-9 15-16 16-17 16-18

ring bonds :

 $1-2 \quad 1-5 \quad 2-3 \quad 3-4 \quad 4-5 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14$

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 5-7 6-8 6-18 15-16 16-17 16-18

exact bonds :

7-8 8-9

normalized bonds :

9-10 9-14 10-11 11-12 12-13 13-14

Match level:

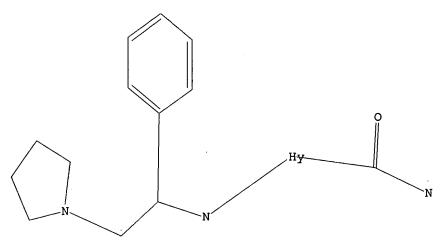
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:Atom

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1

SAMPLE SEARCH INITIATED 18:24:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1356 TO ITERATE

73.7% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 24911 TO 29329

PROJECTED ANSWERS: 0 TO

L2 0 SEA SSS SAM L1

=> s L1 full

FULL SEARCH INITIATED 18:24:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 26680 TO ITERATE

100.0% PROCESSED 26680 ITERATIONS

10 ANSWERS

0 ANSWERS

SEARCH TIME: 00.00.01

L3 10 SEA SSS FUL L1

=> d scan

L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-

1-phenylethyl]methylamino]-N-propyl- (9CI) MF C24 H34 N4 O3

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

CM 1

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

- L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
- IN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI)
- MF C22 H29 F N4 O
- CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3

10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidiny1]-1-IN phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) MF C22 H30 N4 O2 . C4 H4 O4

CM 1

Absolute stereochemistry.

2 CM

Double bond geometry as shown.

L3

10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-IN phenylethyl]methylamino]-N-propyl- (9CI)

MF C22 H30 N4 O2

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI)

MF C21 H29 N3 O2 S . C4 H4 O4

CM 1

Absolute stereochemistry.

$$n-PrNH$$
 S
 N
 S
 OH

CM 2

Double bond geometry as shown.

L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI)

MF C21 H29 N3 O2 S

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 2-Thiophenecarboxamide, 5-[((1S)-2-[(3S)-3-(methoxymethoxy)-1-IN pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) MF C23 H33 N3 O3 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidiny1]-1-L3 IN phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) MF C22 H30 N4 O2 . C4 H4 O4

CM 1

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

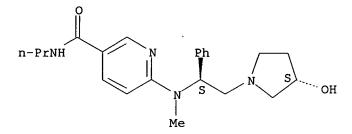
L3

10 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 3-Pyridinecarboxamide, 6-[[2-(3-hydroxy-1-pyrrolidinyl)-1-IN phenylethyl]methylamino]-N-propyl-, [S-(R*,R*)]- (9C1)

MF C22 H30 N4 O2

CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> fil caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
161.76
161.97

FILE 'CAPLUS' ENTERED AT 18:25:20 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 21 Jan 2005 VOL 142 ISS 5 FILE LAST UPDATED: 20 Jan 2005 (20050120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s L3

L4 2 L3

=> d L4 ibib abs hitstr 1-2

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:178439 CAPLUS

DOCUMENT NUMBER: 134:222619

TITLE: Preparation of pyrrolidinyl- and

pyrrolinylethylarylamines as kappa opioid receptor

agonists

INVENTOR(S): Ito, Fumitaka; Kondo, Hiroshi

PATENT ASSIGNEE(S): Pfizer, Inc., USA

SOURCE: U.S., 39 pp., Cont.-in-part of Appl. No.

PCT/IB96/00957. CODEN: USXXAM DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------|-----------|----------------------|----------------------------------|-----------------|
| US 6201007
WO_9812177 | B1
A1 | 20010313
19980326 | US 1999-254805
WO 1997-IB1021 | |
| W: AU, BG, B | R, CA, CN | , CZ, HU, IL | , IS, JP, KR, LK, | LV, MX, NO, NZ, |
| PL, RO, So | , SI, SK | , TR, UA, US | , UZ, VN, YU, AM, | AZ, BY, KG, KZ, |
| MD, RU, To | J, TM | | | |
| RW: AT, BE, C | H, DE, DK | , ES, FI, FR | , GB, GR, IE, IT, | LU, MC, NL, PT, |
| SE, BF, B | , CF, CG | , CI, CM, GA | , GN, ML, MR, NE, | SN, TD, TG |
| JP 2001316344 | A2 | 20011113 | JP 2001-92342 | 19970821 |
| US 2001008890 | A1 | 20010719 | US 2001-770515 | 20010126 |
| US 6310061 | B2 | 20011030 | | |
| US 2001009921 | A1 | 20010726 | US 2001-770513 | 20010126 |
| US 6313302 | В2 | 20011106 | | |
| US 2001011091 | A1 | 20010802 | US 2001-770514 | 20010126 |
| US 6294569 | B2 | 20010925 | | |
| US 2001014683 | A1 | 20010816 | US 2001-771029 | 20010126 |
| US 6307061 | B2 | 20011023 | | |
| US 2001020024 | A1 | 20010906 | US 2001-771030 | 20010126 |
| US 6294557 | B2 | 20010925 | | |
| US 6303602 | B1 | 20011016 | US 2001-770512 | 20010126 |
| PRIORITY APPLN. INFO.: | | | WO 1996-IB957 | A2 19960918 |
| | | | WO 1997-IB1021 | W 19970821 |
| | | | JP 1998-514433 | A3 19970821 |
| | | | US 1999-254805 | A3 19990312 |
| OTHER SOURCE(S): | MARPAT | 134:222619 | | |

OTHER SOURCE(S):

MARPAT 134:222619

GI

AΒ Title compds. [I; A = H, halo, OH, alkyl, haloalkyl, alkoxy, haloalkoxy, O, OY, null; Y = protecting group; broken line = optional double bond; Ar1 = (substituted) Ph; Ar2 = (substituted) Ph, naphththyl, pyridyl, thienyl, furyl, pyrrolyl, pyrimidinyl; R1 = H, OH, alkyl, alkoxy, OY; and R2, R3 = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, Ph, etc.; R2R3N = (substituted) pyrrolidinyl, piperidinyl, morpholinyl], were prepared as κ agonists (no data). Thus, a mixture of 2-(3-(S)methoxymethoxypyrrolidin-1-y1)-1-(S)-phenylethanol, 2-(3-(S)-y)methoxymethoxypyrrolidin-1-yl)-2-(R)-phenylethanol (preparation given), andEt3N in CH2Cl2 was treated with MeSO2Cl at 0° followed by 5,5 h stirring at room temperature to give a residue which was refluxed 1.5 h with Me 4-methylaminobenzoate in EtOH to give 62.5% Me 4-[N-[2-(3 (S)-methoxymethoxypyrrolidin-1-yl)-1-(S)-phenylethyl]-Nmethylamino]benzoate. This was saponified with NaOH in MeOH (quant.) and the acid was stirred with PrNH2 and 1-ethyl-3-(3-dimethylaminopropyl)carbodiim ide hydrochloride in CH2Cl2 to give 72% Me 4-[N-[2-(3-(S)methoxymethoxypyrrolidin-1-yl)-1-(S)-phenylethyl]-N-methylamino]-N'propylbenzamide.

IT 204971-73-3P 204971-75-5P 204971-86-8P 204971-87-9P 204972-51-0P 204972-52-1P 204972-62-3P 204972-63-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of pyrrolidinyl- and pyrrolinylethylarylamines as kappa opioid receptor agonists)
204971-73-3 CAPLUS
3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-

Absolute stereochemistry.

RN

CN

RN 204971-75-5 CAPLUS
CN 3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI)
(CA INDEX NAME)

1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

CM 1

CRN 204971-74-4 CMF C22-H30 N4 O2-

Absolute stereochemistry.

Double bond geometry as shown.

RN 204971-86-8 CAPLUS

CN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

204971-87-9 CAPLUS___-

CN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute_stereochemistry.

204972-51-0 CAPLUS RN

2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN204972-52-1 CAPLUS

2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-CN phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-51-0 CMF C22 H30 N4 O2

Absolute stereochemistry:

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-62-3 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me
F. S. N. Ph
NHPr-n

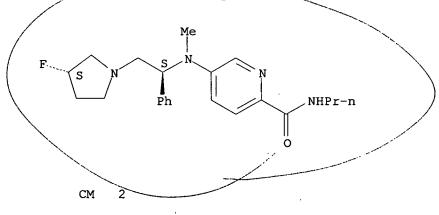
RN 204972-63-4 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-62-3 CMF C22 H29 F N4 O

Absolute stereochemistry.



CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

$$_{\rm HO_2C}$$
 $^{\rm E}$ $_{\rm CO_2H}$

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:199673 CAPLUS

DOCUMENT NUMBER:

128:243949

TITLE:

128:243949
Preparation of pyrrolidinyl- and pyrrolinylethylamines

INVENTOR(S):

as kappa agonists. Ito, Fumitaka; Kondo, Hiroshi

PATENT ASSIGNEE(S): Pfizer Inc., USA; Pfizer Pharmaceuticals Inc.

SOURCE:

PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PAT | ENT_ | N.Q. | | | KINI |) | DATE | | | APP | LICA | CION : | NO. | | D | ATE | |
|----------|--------------|------|------------|-----|------------|-----|--------------|------|-----|-----|-------|----------------|-----|-----|-----|----------------|-----|
| WO | 9812 | 177 | } | | A 1 | | 1998 | 0326 | > | WO | 1997- | -IB10 | 21 | | 1 | 99708 | 321 |
| | W: | | BG. | BR, | K | | | | _ | | | KR, | - | LV, | | | |
| | | | | | | | | | | | | YU, | | | | | |
| | | MD, | RU, | ТJ, | TM | • | | | | | | | | | | | |
| | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | GB | , GR | IE, | IT, | LU, | MC, | NL, | PT, |
| | | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | | | | , MR, | | | TD, | TG | |
| TW | 4320 | 47 | | | В | | 2001 | 0501 | | | | -8611 | | | 1 | 99708 | 320 |
| AU | 9737 | 812 | | | A1 | | 1998 | 0414 | | AU | 1997- | -3781 | 2 | | 1 | 99708 | 321 |
| | 7198 | | | | B2 | | 2000 | | | | | | | | | | |
| | 9342 | | | | A 1 | | | | | ΕP | 1997- | -9346 | 76 | | 15 | 99708 | 321 |
| EP | 9342 | | | | B1 | | 2003 | | | | | | | • | | | |
| | R: | - | - | | | | ES, | FR, | GB, | GF | R, IT | , LI, | LU, | NL, | SE, | MC, | PT, |
| | | - | SI, | LV, | FI, | RO | | | | | | | _ | | | | |
| | 9711 | | | | Α | | 1999 | | | | | -1150 | | | | 99708 | |
| | 1237 | | | | Α | | 1999 | | | | | -1998 | | | | 9970 | |
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| | 2001 | | 44 | | A2 | | 2001 | | | | | -9234 | | | | 99708 | |
| | 2494 | | | | E | | 2003 | | | | | -9346 | | | _ | 9970 | |
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| | 2266 | | | | AA | | 1998 | | | | 1007 | 0046 | 7.0 | | - | 0070 | 201 |
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| | 2205 | | | | Т3 | | 2004 | | | | | -9346 | | | | 9970 | |
| AP | 1016 | | co.e | CII | A | | 2001 | | | | | -1082 | | | 1 | 99709 | 911 |
| 77 | | | GM, | GH, | | LS, | | | | | , ZM | | | | 7 (| 0070 | 217 |
| | 9708
6419 | | | | A
D1 | | 1999 | | | | | -8358 | | | | 9970 | |
| _ | 6201 | | \ | | B1
B1 | | -2004 | | ` | | | -1032
-2548 | | | | 9990:
9990: | |
| | 9901 | | <i>!</i> | | | | 2001
1999 | | , | | | -2346
-1294 | 03 | | _ | 9990.
9990: | |
| | 2000 | | | | <u>A</u> . | _ | 2000 | | | | | -1294
-7022 | 07 | | | 9990.
9990: | |
| | 2000 | | | | A1 | | 2000 | | | | | -7022
-7705 | | | | 0010: | |
| | 6310 | | 90 | | B2 | | 2001 | | | 0.5 | 2001 | 1103 | 13 | | ۷. | 0010. | 120 |
| | 2001 | | 21 | | A1 | | 2001 | | | 115 | 2001. | -7705 | 13 | | 2 | 0010 | 126 |
| | 6313 | | <i>د</i> ۲ | | B2 | | 2001 | | | US | 2001 | 1103 | 13 | | 2 | 0010. | 120 |
| | 2001 | | 91 | | A1 | | 2001 | | | פוז | 2001. | -7705 | 14 | | 2 | 0010 | 126 |
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| | 2001 | | 83 | | A1 | | 2001 | | | US | 2001- | -7710 | 29 | | 2 | 0010 | 126 |
| | 6307 | | • | | B2 | | 2001 | | | 0.0 | | ,,, | | | _ | | |
| | 2001 | | 2.4 | | A1 | | 2001 | | | US | 2001- | -7710 | 30 | | 2 | 0010 | 126 |
| | 6294 | | - | | B2 | | 2001 | | | - ~ | | 20 | | | _ | | |
| | 6303 | | | | B1 | | 2001 | | | US | 2001 | -7705 | 12 | | 2 | 0010 | 126 |
| PRIORITY | | | INFO | . : | | | | | | | | -IB95 | | | | 9960 | |
| | | | | - | | | | | | | | -5144 | | | | 9970 | |
| | | | | | | | | | | | | -IB10 | | | | 9970 | |
| | | | | | | | | | | - | | | | | _ | | |

OTHER SOURCE(S):

MARPAT 128:243949

$$\begin{array}{c|c}
 & \text{Ar}^1 \\
 & \text{N} & \text{Ar}^2 \\
 & \text{N} & \text{NR}^2 \\
 & \text{N} & \text{NR}^2 \\
 & \text{NR}^3
\end{array}$$

AB Title compds. [I; A = null, H, halo, OH, alkyl, haloalkyl, alkoxy, haloalkoxy, etc.; dotted line = optional double bond; Ar1 = (substituted) Ph; Ar2 = (substituted) Ph, naphthyl, pyridyl, thienyl, furyl, pyrrolyl, pyrimidinyl; R1 = H, OH, alkyl, alkoxy, etc.; R2, R3 = H, OH, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, Ph, phenylalkyl, etc.; R2R3N = (substituted) pyrrolidinyl, piperidinyl, morpholinyl], were prepared Thus, 2-[3(S)-methoxymethoxypyrrolidin-1-yl]-1(RS)-phenylethanol (preparation given) and Et3N in CH2Cl2 were treated with MeSO2Cl at 0° to give a residue which was refluxed with Me 4-methylaminobenzoate in EtOH to give 62.5% Me 4-[N-[2-[3(S)methoxymethoxypyrrolidin-1-yl]-1(S)-phenylethyl]-N-methylamino]benzoate. This was saponified with 4N NaOH in MeOH (100%) and the resulting acid was stirred with PrNH2 and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH2Cl2 to give 72% 4-[N-[2-[3(S)-methoxymethoxypyrrolidin-1-yl]-1(S)-phenylethyl]-N-methylamino]-N'-propylbenzamide. inhibited acute pain in rats with ED50 <10 mg/kg orally.

IT 204971-73-3P 204971-74-4P 204971-75-5P 204971-86-8P 204971-87-9P 204971-88-0P 204972-51-0P 204972-52-1P 204972-62-3P 204972-63-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrrolidinyl- and pyrrolinylethylamines as kappa agonists) 204971-73-3 CAPLUS

CN 3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

RN 204971-74-4 CAPLUS

CN 3-Pyridinecarboxamide, 6-[[2-(3-hydroxy-1-pyrrolidinyl)-1-phenylethyl]methylamino]-N-propyl-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-75-5 CAPLUS

CN 3-Pyridinecarboxamide, 6-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204971-74-4 CMF C22 H30 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

$$_{\rm HO_2C}$$
 $^{\rm E}$ $_{\rm CO_2H}$

RN 204971-86-8 CAPLUS

CN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-87-9 CAPLUS

CN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-

phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-88-0 CAPLUS

CN 2-Thiophenecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204971-87-9 CMF C21 H29 N3 O2 S

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-51-0 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-52-1 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-

phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI)
 (CA INDEX NAME)

CM 1

CRN 204972-51-0 CMF C22 H30 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-62-3 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-63-4 CAPLUS

CN 2-Pyridinecarboxamide, 5-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-62-3 CMF C22 H29 F N4 O

Absolute stereochemistry.

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10699106h

1/21/05-

Welcome to STN International! Enter x:x

LOGINID: SSSPTAAJP1626

PASSWORD:

NEWS

NEWS

16 JAN 03

17 JAN 11

TERMINAL (ENTER 1, 2, 3, OR ?):2

 $G_{1} = C, S$

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CA/CAPLUS - Expanded patent coverage to include Russia

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(Federal Institute of Industrial Property)

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FILE 'HOME' ENTERED AT 19:17:17 ON 21 JAN 2005

February 2005

=> fil reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0 DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

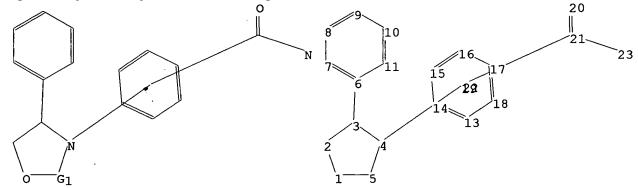
Please note that search-term pricing does apply when conducting SmartSELECT searches. $\dot{}$

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>

Uploading C:\Program Files\Stnexp\Queries\10699106d.str



chain nodes : 20 21 23 ring nodes : 1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 chain bonds : 3-6 20-21 21-23 ring bonds : 1-2 1-5 2-3 3-4 7-8 8-9 9-10 10-11 13-14 13-18 14-15 4-5 6-7 6-11 15-16 16-17 17-18 exact/norm bonds : 1-2 1-5 2-3 3-4 3-6 4-5 20-21 21-23 normalized bonds : 6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15 15-16 16-17 17-18

G1:C,S

Match level:

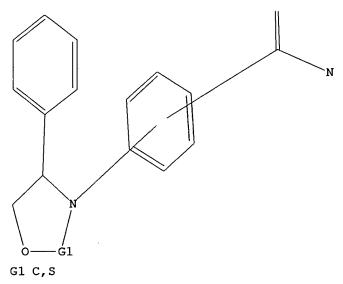
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s T.1

SAMPLE SEARCH INITIATED 19:17:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1347 TO ITERATE

74.2% PROCESSED 1000 ITERATIONS

00 TEEDAMTONG

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 24739 TO 29141

PROJECTED ANSWERS: 0 TO

L2 0 SEA SSS SAM L1

=> s L1 full

FULL SEARCH INITIATED 19:17:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 27114 TO ITERATE

100.0% PROCESSED 27114 ITERATIONS SEARCH TIME: 00.00.01

4 ANSWERS

0 ANSWERS

=> fil caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 161.33 161.54

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 19:18:07 ON 21 JAN 2005
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FILE COVERS 1907 - 21 Jan 2005 VOL 142 ISS 5 FILE LAST UPDATED: 20 Jan 2005 (20050120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> fil reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 161.99

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0 DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d L3 1-4 all

L3 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN

RN 686347-75-1 REGISTRY

ED Entered STN: 27 May 2004

CN Benzamide, 4-(2,2-dioxido-4-phenyl-1,2,3-oxathiazolidin-3-yl)-N-propyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4-(2,2-Dioxo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide

FS 3D CONCORD

MF C18 H20 N2 O4 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Ring System Data

| Elemental | Elemental | Size of | Ring System | Ring | RID |
|-----------|-----------|-----------|-------------|-------------------------------------|------------|
| Analysis | Sequence | the Rings | Formula | Identifier | Occurrence |
| EA | ES | , | | | Count |
| C2NOS | | 15 | • | +=======
 16.272.1
 46.150.18 | 11 |

Calculated Properties (CALC)

| PROPERTY (CODE) | VALUE | CONDITION | • |
|--------------------------|----------|------------|---------|
| Bioconc. Factor (BCF) | 16.8 | +
 рН 1 | (1) ACD |
| Bioconc. Factor (BCF) | 16.8 | pH 4 | (1) ACD |
| Bioconc. Factor (BCF) | 16.8 | pH 7 | (1) ACD |
| Bioconc. Factor (BCF) | 16.8 | 8 Hq | (1) ACD |
| Bioconc. Factor (BCF) | 16.8 | pH 10 | (1) ACD |
| Freely Rotatable Bonds (| FRB) 6 | ٦ | (1) ACD |
| H acceptors (HAC) | 16 | 1 | (1) ACD |
| H donors (HD) | 1 | 1 | (1) ACD |
| Koc (KOC) | 1262 | pH 1 | (1) ACD |
| Koc (KOC) | 1262 | pH 4 | (1) ACD |
| Koc (KOC) | 262 | pH 7 | (1) ACD |
| Koc (KOC) | 1262 | 8 Hq | (1) ACD |
| Koc (KOC) | 1262 | pH 10 | (1) ACD |
| logD (LOGD) | 1.91 | pH 1 | (1) ACD |
| logD (LOGD) | 11.91 | pH 4 | (1) ACD |
| logD (LOGD) | 11.91 | pH 7 | (1) ACD |

```
8 Hq|
                                  11.91
                                                               |(1) ACD
logD (LOGD)
logD (LOGD)
                                  |1.91
                                                   |pH 10
                                                               |(1) ACD
                                  |1.915+/-0.687|
logP (LOGP)
                                                               |(1) ACD
                                |<0.01 mol/L |pH 1
Molar Solubility (SLB.MOL)
                                                               |(1) ACD
Molar Solubility (SLB.MOL) |<0.01 mol/L |pH 4
                                                               (1) ACD
Molar Solubility (SLB.MOL)
                                |<0.01 mol/L |pH 7
                                                               |(1) ACD
Molar Solubility (SLB.MOL)
                                |<0.01 mol/L |pH 8</pre>
                                                               |(1) ACD
Molar Solubility (SLB.MOL) |<0.01 mol/L |pH 10 Molecular Weight (MW) |360.43 |
                                                               |(1) ACD
                                                               |(1) ACD
      Calculated using Advanced Chemistry Development (ACD/Labs) Software
      Solaris V4.76 ((C) 1994-2005 ACD/Labs)
See HELP PROPERTIES for information about property data sources in REGISTRY.
                  1 REFERENCES IN FILE CA (1907 TO DATE)
                  1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE 1
      140:391196 CA
AN
      Process for the preparation of pyrrolidinyl ethylamine compounds via a
ΤI
      copper-mediated aryl amination
      Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel
IN
PA
      Pfizer Products Inc., USA
SO
      PCT Int. Appl., 34 pp.
                                                                          our app
      CODEN: PIXXD2
DT
      Patent
      English
LΑ
      ICM C07D
IC
      ICS C07D291-04; C07D207-12
CC
      27-10 (Heterocyclic Compounds (One Hetero Atom))
      Section cross-reference(s): 45
FAN.CNT 2
                          KIND DATE
      PATENT-NO.
                                                  APPLICATION NO. DATE
                                                    _____
                                  20040513)
      WO 2004039785
                           A1
                                                  WO 2003-IB4676
                                                                         20031022
PΙ
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
               GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
               LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
          OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A1 20040805

20021101

US 2004152896

PRAI US 2002-423328P

The invention provides a new process for the preparation of the well-known kappa agonists I via a copper salt-catalyzed amination of an oxazolidinone II with an aryl halide III in the presence of an amino ligand and a base [wherein A = H, OH and derivs., fluoro/alkyl, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted Ph, naphthyl, pyridinyl, thiophenyl, furyl, pyrrolyl, pyrimidinyl; R1 = alkyl, benzyl, with its Ph part optionally substituted; R2, R3 = independently H, (un)substituted alkyl, or R2R3N =

US 2003-699106 20031031

(un) substituted pyrrolidine, piperidine, morpholine; X = Cl, Br, I]. The advantages of the aryl amination include high yields, mild, efficient, cost-effective and robust process. For example, aryl amination of S-(+)-4-phenyloxazolidin-2-one with 4-bromo-N-propylbenzamide in the presence of CuI/K2CO3 gave the intermediate IV, used in the synthesis of pyrrolidinyl ethylamine V. pyrrolidinyl ethylamine prepn copper aryl amination Amination (aryl; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Amination catalysts (process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Amines, preparation RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (products; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Aryl halides RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 686347-77-3P, Benzoic acid 1-[2-[methyl[4-(propylcarbamoyl)phenyl]amino]-2phenylethyl]pyrrolidin-3-yl ester RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (amine product; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 497-19-8, Sodium carbonate, uses 534-17-8, Cesium carbonate 584-08-7, Potassium carbonate RL: NUU (Other use, unclassified); USES (Uses) (base; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 7681-65-4, Copper iodide (CuI) 7758-89-6, Copper chloride (CuCl) 7787-70-4, Copper bromide (CuBr) RL: CAT (Catalyst use); USES (Uses) (catalyst; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 686347-72-8P, 4-(2-0xo-4-phenyloxazolidin-3-yl)-N-propylbenzamide 686347-73-9P, 4-[(2-Hydroxy-1-phenylethyl)amino]-N-propylbenzamide 686347-74-0P, 4-(2-Oxo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-Npropylbenzamide 686347-75-1P, 4-(2,2-Dioxo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide 686347-76-2P, Benzoic acid 1-[2-phenyl-2-[[4-(propylcarbamoyl)phenyl]amino]ethyl]pyrrolidin-3-yl RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 694-83-7, 1,2-Diaminocyclohexane RL: CAT (Catalyst use); USES (Uses) (ligand; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 99395-88-7, (S)-(+)-4-Phenyloxazolidin-2-one 99855-14-8, Benzoic acid pyrrolidin-3-yl ester hydrochloride 223557-19-5, 4-Bromo-N-propylbenzamide RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination)

- L3 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 686347-74-0 REGISTRY

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ED Entered STN: 27 May 2004

CN Benzamide, 4-(2-oxido-4-phenyl-1,2,3-oxathiazolidin-3-yl)-N-propyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4-(2-Oxo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide

FS 3D CONCORD

MF C18 H20 N2 O3 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Ring System Data

| Elementa | l Elemental | l Size of | Ring System | ı Ring | RID |
|----------|-------------|------------|-------------|------------|------------|
| Analysis | Sequence | the Rings | Formula | Identifier | Occurrence |
| EA | l ES | l SZ | RF | RID | Count |
| ======= | =+====== | =+======= | +======== | +======= | +======= |
| C2NOS | NSOC2 | 15 | C2NOS | 16.272.1 | 1 |
| C6 | C6 | 16 | IC6 | 46.150.18 | 12 |

Calculated Properties (CALC)

| PROPERTY (CODE) | VALUE | CONDITIO | |
|----------------------------|---------------------|------------|---------|
| Bioconc. Factor (BCF) | ==+=======
 9.71 | +
 pH 1 | (1) ACD |
| Bioconc. Factor (BCF) | 9.72 | pH 4 | (1) ACD |
| Bioconc. Factor (BCF) | 9.72 | pH 7 | (1) ACD |
| Bioconc. Factor (BCF) | 19.72 | pH 8 | (1) ACD |
| Bioconc. Factor (BCF) | 19.72 | pH 10 | (1) ACD |
| Freely Rotatable Bonds (FR | B) 6 | ļ | (1) ACD |
| H acceptors (HAC) | 5 | 1 | (1) ACD |
| H donors (HD) | 1 | 1 | (1) ACD |
| Koc (KOC) | 177 | pH 1 | (1) ACD |
| Koc (KOC) | 177 | pH 4 | (1) ACD |
| Koc (KOC) | 177 | pH 7 | (1) ACD |
| Koc (KOC) | 177 | 8 Hq | (1) ACD |
| Koc (KOC) | 177 | pH 10 | (1) ACD |
| logD (LOGD) | 1.60 | pH 1 | (1) ACD |
| logD (LOGD) | 1.60 | pH 4 | (1) ACD |
| logD (LOGD) | 11.60 | pH 7 | (1) ACD |

```
|(1) ACD
                                           |pH 8
logD (LOGD)
                             |1.60
logD (LOGD)
                                           |pH 10
                                                      |(1) ACD
                             |1.60
logP (LOGP)
                             |1.603+/-0.669|
                                                     |(1) ACD
                                                     |(1) ACD
Molar Solubility (SLB.MOL)
                            |<0.01 \text{ mol/L}|
                                          |pH 1
Molar Solubility (SLB.MOL)
                            |<0.01 \text{ mol/L}|
                                           |pH 4
                                                     |(1) ACD
Molar Solubility (SLB.MOL)
                            |<0.01 \text{ mol/L}|
                                           |pH 7
                                                     |(1) ACD
Molar Solubility (SLB.MOL)
                            |<0.01 \text{ mol/L}|
                                           8 Hq|
                                                     |(1) ACD
Molar Solubility (SLB.MOL) |<0.01 mol/L
                                           |pH 10
                                                     |(1) ACD
Molecular Weight (MW)
                             1344.43
                                           1
                                                      |(1) ACD
     Calculated using Advanced Chemistry Development (ACD/Labs) Software
     Solaris V4.76 ((C) 1994-2005 ACD/Labs)
See HELP PROPERTIES for information about property data sources in REGISTRY.
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE 1
     140:391196 CA
AN
     Process for the preparation of pyrrolidinyl ethylamine compounds via a
TI
     copper-mediated aryl amination
     Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel
IN
PA
     Pfizer Products Inc., USA
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
IC
     ICM C07D
     ICS C07D291-04; C07D207-12
     27-10 (Heterocyclic Compounds (One Hetero Atom))
     Section cross-reference(s): 45
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
     WO 2004039785
                       A1
                            20040513
                                           WO 2003-IB4676
                                                              20031022
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
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US 2004152896 PRAI US 2002-423328P

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A1 \ 20040805

20021/101

The invention provides a new process for the preparation of the well-known kappa agonists I via a copper salt-catalyzed amination of an oxazolidinone II with an aryl halide III in the presence of an amino ligand and a base [wherein A = H, OH and derivs., fluoro/alkyl, etc.; Arl = (un)substituted phenyl; Ar2 = (un)substituted Ph, naphthyl, pyridinyl, thiophenyl, furyl, pyrrolyl, pyrimidinyl; R1 = alkyl, benzyl, with its Ph part optionally substituted; R2, R3 = independently H, (un)substituted alkyl, or R2R3N =

OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,

US 2003-699106 20031031

OM, PH, PL, PT, KO, KU, SC, SD, SE, SG, SR, SD, SI, IO, III, IR, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

(un) substituted pyrrolidine, piperidine, morpholine; X = Cl, Br, I]. The advantages of the aryl amination include high yields, mild, efficient, cost-effective and robust process. For example, aryl amination of S-(+)-4-phenyloxazolidin-2-one with 4-bromo-N-propylbenzamide in the presence of CuI/K2CO3 gave the intermediate IV, used in the synthesis of pyrrolidinyl ethylamine V. pyrrolidinyl ethylamine prepn copper aryl amination Amination (aryl; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Amination catalysts (process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Amines, preparation RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (products; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) Aryl halides RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 686347-77-3P, Benzoic acid 1-[2-[methyl[4-(propylcarbamoyl)phenyl]amino]-2phenylethyl]pyrrolidin-3-yl ester RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (amine product; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 534-17-8, Cesium carbonate 497-19-8, Sodium carbonate, uses 584-08-7, Potassium carbonate RL: NUU (Other use, unclassified); USES (Uses) (base; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 7758-89-6, Copper chloride (CuCl) 7681-65-4, Copper iodide (CuI) 7787-70-4, Copper bromide (CuBr) RL: CAT (Catalyst use); USES (Uses) (catalyst; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 686347-72-8P, 4-(2-0xo-4-phenyloxazolidin-3-yl)-N-propylbenzamide 686347-73-9P, 4-[(2-Hydroxy-1-phenylethyl)amino]-N-propylbenzamide 686347-74-0P, 4-(2-0xo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-Npropylbenzamide 686347-75-1P, 4-(2,2-Dioxo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide 686347-76-2P, Benzoic acid 1-[2-phenyl-2-[[4-(propylcarbamoyl)phenyl]amino]ethyl]pyrrolidin-3-yl RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 694-83-7, 1,2-Diaminocyclohexane RL: CAT (Catalyst use); USES (Uses) (ligand; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 99395-88-7, (S)-(+)-4-Phenyloxazolidin-2-one 99855-14-8, Benzoic acid pyrrolidin-3-yl ester hydrochloride 4-Bromo-N-propylbenzamide RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination)

- L3 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 686347-72-8 REGISTRY

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ΙT

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IT

ED Entered STN: 27 May 2004

Benzamide, 4-(2-oxo-4-phenyl-3-oxazolidinyl)-N-propyl- (9CI) (CA INDEX CN

OTHER NAMES:

3-[4-[(Propylamino)carbonyl]phenyl]-4-phenyloxazolidin-2-one

CN 4-(2-Oxo-4-phenyloxazolidin-3-yl)-N-propylbenzamide

FS 3D CONCORD

MF C19 H20 N2 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Ring System Data

| Elemental | l Elementa | l Size of | Ring System | ı Ring | RID |
|-----------|--------------------|------------|-------------|------------|------------|
| Analysis | Sequence | the Rings | Formula | Identifier | Occurrence |
| EA | l ES | l SZ | RF | RID | Count |
| ======= | =+= == ==== | =+====== | +======== | +======== | +======== |
| C3NO | NCOC2 | 5 | 1C3NO | 16.239.1 | 1 |
| C6 | C6 | 16 | C6 | 46.150.18 | 12 |

Calculated Properties (CALC)

| PROPERTY (CODE) | VALUE | CONDITION | · |
|------------------------------|--|---------------|---------|
| Bioconc. Factor (BCF) | +===================================== | +===
 рН 1 | (1) ACD |
| Bioconc. Factor (BCF) | 30.1 | pH 4 | (1) ACD |
| Bioconc. Factor (BCF) | 30.1 | pH 7 | (1) ACD |
| Bioconc. Factor (BCF) | 30.1 | pH 8 | (1) ACD |
| Bioconc. Factor (BCF) | 30.1 | pH 10 | (1) ACD |
| Boiling Point (BP) | 528.4+/-49.0 deg C | 760 Torr | (1) ACD |
| Enthalpy of Vap. (HVAP) | 80.32+/-3.0 kJ/mol | 1 | (1) ACD |
| Flash Point (FP) | 273.3+/-53.7 deg C | 1 | (1) ACD |
| Freely Rotatable Bonds (FRB) | 16 | 1 | (1) ACD |
| H acceptors (HAC) | 15 | 1 | (1) ACD |
| H donors (HD) | 1 | 1 | (1) ACD |
| Koc (KOC) | 397 | pH 1 | (1) ACD |
| Koc (KOC) | 398 | pH 4 | (1) ACD |
| Koc (KOC) | 398 | pH 7 | (1) ACD |
| Koc (KOC) | 398 | pH 8 | (1) ACD |
| Koc (KOC) | 398 | pH 10 | (1) ACD |

```
|pH 1
logD (LOGD)
                                12.25
                                                                  |(1) ACD
                                12.25
                                                      pH 4
logD (LOGD)
                                                                  |(1) ACD
                                12.25
                                                      |pH 7
logD (LOGD)
                                                                  |(1) ACD
                                                      8 Hql
logD (LOGD)
                                12.25
                                                                  |(1) ACD
logD (LOGD)
                                12.25
                                                      |pH 10
                                                                  |(1) ACD
logP (LOGP)
                                12.248+/-0.644
                                                                  |(1) ACD
                                                      1
Molar Solubility (SLB.MOL)
                               |<0.01 \text{ mol/L}|
                                                      |pH 1
                                                                  |(1) ACD
                                                      |pH 4
Molar Solubility (SLB.MOL)
                                |<0.01 \text{ mol/L}|
                                                                  |(1) ACD
                                                      |pH 7
Molar Solubility (SLB.MOL)
                                |<0.01 \text{ mol/L}|
                                                                  |(1) ACD
Molar Solubility (SLB.MOL)
                                |<0.01 \text{ mol/L}|
                                                      8 Hq
                                                                  |(1) ACD
Molar Solubility (SLB.MOL)
Molecular Weight (MW)
                               |<0.01 \text{ mol/L}|
                                                      |pH 10
                                                                  |(1) ACD
                                1324.37
                                                                  |(1) ACD
                                |2.99E-11 Torr
Vapor Pressure (VP)
                                                      |25 deg C | (1) ACD
     Calculated using Advanced Chemistry Development (ACD/Labs) Software
```

Solaris V4.76 ((C) 1994-2005 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

```
ΑN
     140:406800 CA
     Methods for preparing N-aryl oxazolidinones via a copper catalyzed cross
TI
     coupling reaction
IN
     Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel
     Pfizer Products Inc., USA
PA
     PCT Int. Appl., 28 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM C07D263-22
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
```

_____ ____ -----PΙ WO 2004039788 A1 20040513 WO 2003-IB4708 20031022 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, g BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG ____A1 20040624 US 2004122226 US 2003-645779 20030821

US 2002-423328P 20021101 PRAL US 2003-645779 20030821

GΙ

us 20040122226 A1 (6/2/03

Methods for the preparation of N-aryl oxazolidinones (shown as I; variables AB defined below; e.g. (R)-4-ethyl-3-(4-trifluoromethylphenyl)oxazolidin-2one (II)) via a Cu catalyzed cross coupling reaction are disclosed. These compds. are intermediates useful in the preparation of cholesteryl ester transfer protein inhibitors. Preferred catalyst ligands are MeNHCH2CH2NHMe and 1,2-diaminocyclohexane. For example, II was prepared by charging K2CO3 (87 mmol) and CuI (4.4 mmol) to a flask under N2 and adding (R)-4-ethyloxazolidin-2-one (43.5 mmol) and 1-bromo-4trifluoromethylbenzene (42.8 mmol) each diluted in 20 mL dioxane to the flask followed by 1,2-diaminocyclohexane (4.4 mmol); the bright blue mixture was heated to 110° and held for 22 h; workup gave 86 % product. Further examples describe the conversion of II to (R)-2-(4trifluoromethylphenylamino)butan-1-ol (97 %), (R)-4-ethyl-3-(4trifluoromethylphenyl)-[1,2,3]oxathiazolidine 2-oxide (81 %) and finally (R)-3-(4-trifluoromethylphenylamino) pentanenitrile (81 %). Six addnl. examples of preparation of I are included. For I: R1 is a partially saturated, fully saturated or fully unsatd. (C1-C4) straight or branched C chain wherein the carbons, other than the connecting C, may optionally be replaced with one heteroatom = O, S and N wherein said C atoms are optionally mono, dior trisubstituted independently with halo, said C is optionally monosubstituted with oxo or hydroxy, said S is optionally mono- or disubstituted with oxo, said N is optionally mono- or disubstituted with oxo; or said R1 is a partially saturated, fully saturated or fully unsatd. 3-5-membered ring optionally having one heteroatom = 0, S and N; wherein said R1 ring is optionally mono, di- or trisubstituted independently with halo, (C1-C6) alkoxy, nitro, (C1-C4) alkyloxycarbonyl. R2 is H, C1-C4 alkyl, C3-C6 cycloalkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl; Ph (un) substituted with C1-C6 alkoxy or OY wherein Y is a hydroxy protecting group, halogen, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl, trifluoromethyl, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyl, or cyano; or benzyl with the Ph moiety of the benzyl (un) substituted with C1-C6 alkoxy or OY wherein Y is a hydroxy protecting group, halogen, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy-C1-C4 alkyl, trifluoromethyl, amido, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyl or cyano; wherein Ar is an aromatic hydrocarbon or heteroarom. moiety Ph, naphthyl, pyridyl, thiophenyl, furanyl, pyrrolyl and pyrimidyl, imidazolyl, oxazolyl, thiazolyl, triazolyl, pyrazolyl, pyrazinyl, pyridazinyl each of which may be (un)substituted by ≥ 1 , preferably 1-2, substituents = halo, hydroxy, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl, CF3, amino, amido, imines, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyls (ketones and aldehydes), cyano. arylation oxazolidinone copper catalyzed cross coupling IT Arylation Arylation catalysts Cross-coupling reaction Cross-coupling reaction catalysts (methods for preparing N-aryl oxazolidinones via copper catalyzed cross coupling reaction) ΙT 19319-86-9, Dibromo (o-phenanthroline) copper RL: CAT (Catalyst use); USES (Uses) (catalyst comparison; methods for preparing N-aryl oxazolidinones via copper catalyzed cross coupling reaction) TΤ 66-71-7, o-Phenanthroline 107-15-3, Ethylenediamine, uses 107-21-1, 109-83-1, 2-(Methylamino)ethanol 110-70-3, Ethylene glycol, uses N, N'-Dimethylethylenediamine 366-18-7, 2,2'-Bipyridine 1121-22-8, 67579-81-1, trans-1,2trans-1,2-Diaminocyclohexane Bis (methylamino) cyclohexane RL: CAT (Catalyst use); USES (Uses)

(catalyst ligand comparison; methods for preparing N-aryl oxazolidinones

via copper catalyzed cross coupling reaction)

```
108-00-9, N,N-Dimethylethylenediamine
                                             694-83-7, 1,2-Diaminocyclohexane
     RL: CAT (Catalyst use); USES (Uses)
        (catalyst ligand; methods for preparing N-aryl oxazolidinones via copper
        catalyzed cross coupling reaction)
     99-90-1, 4'-Bromoacetophenone
                                     106-37-6, 1,4-Dibromobenzene
IT
                                 352-34-1, 4-Fluorophenyl iodide
     Phenyl bromide, reactions
                                                                    402-43-7,
     4-(Trifluoromethyl)phenyl bromide 455-13-0, 4-(Trifluoromethyl)phenyl
              591-50-4, Phenyl iodide
                                        623-00-7, 4-Cyanophenyl bromide
     5856-63-3, (R)-2-Amino-1-butanol
                                        7480-32-2, 4-Phenyloxazolidin-2-one
    16112-60-0, 4-Ethyloxazolidin-2-one 17016-83-0,
     (S)-4-Isopropyloxazolidin-2-one 90319-52-1, (R)-4-Phenyloxazolidin-2-one 99395-88-7, (S)-4-Phenyloxazolidin-2-one 223557-19-5,
     4-Bromo-N-propylbenzamide
                                 330555-60-7, (S)-5-
     [(Trityloxy)methyl]oxazolidin-2-one
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (methods for preparing N-aryl oxazolidinones via copper catalyzed cross
        coupling reaction)
                                                688789-23-3P,
IT
     98974-04-0P, (R)-4-Ethyloxazolidin-2-one
     (R)-4-Ethyl-3-(4-trifluoromethylphenyl)oxazolidin-2-one
                                                                688789-24-4P,
     (R)-2-(4-Trifluoromethylphenylamino)butan-1-ol
                                                      688789-25-5P,
     (3R)-4-Ethyl-3-(4-trifluoromethylphenyl)-[1,2,3]oxathiazolidine 2-oxide
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (methods for preparing N-aryl oxazolidinones via copper catalyzed cross
        coupling reaction)
IT
     13606-71-8P, 3,4-Diphenyloxazolidin-2-one
                                                 474645-91-5P,
     (R)-3-(4-Trifluoromethylphenylamino)pentanenitrile 513068-72-9P,
     3-(4-Cyanophenyl)-4-phenyloxazolidin-2-one
                                                  572923-34-3P,
     (S)-3, 4-Diphenyloxazolidin-2-one 686347-72-8P,
     3-[4-[(Propylamino)carbonyl]phenyl]-4-phenyloxazolidin-2-one
                                                                     688789-20-0
     P, 3-[4-(Trifluoromethyl)phenyl]-4-phenyloxazolidin-2-one 688789-21-1P,
     3-(4-Fluorophenyl)-4-phenyloxazolidin-2-one 688789-22-2P,
     3-[4-(Trifluoromethyl)phenyl]-4-ethyloxazolidin-2-one 688789-26-6P,
     (S)-4-(4-Isopropyl-2-oxooxazolidin-3-yl)-N-propylbenzamide 688789-27-7P,
     (R)-3,4-Diphenyloxazolidin-2-one 688789-28-8P,
     (R)-4-(2-0xo-4-phenyloxazolidin-3-yl)benzonitrile
                                                         688789-29-9P,
     (S)-3-(4-Acetylphenyl)-5-[(trityloxy)methyl]oxazolidin-2-one 688789-30-2
     P, (R)-3-(4-Bromophenyl)-4-phenyloxazolidin-2-one
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (methods for preparing N-aryl oxazolidinones via copper catalyzed cross
        coupling reaction)
REFERENCE 2
     140:391196 CA
AN
ΤI
     Process for the preparation of pyrrolidinyl ethylamine compounds via a
     copper-mediated aryl amination
     Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel
IN
     Pfizer Products Inc., USA
PA
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM C07D
     ICS C07D291-04; C07D207-12
     27-10 (Heterocyclic Compounds (One Hetero Atom))
     Section cross-reference(s): 45
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                         WO 2003-IB4676
                    A1 20040513
                                                             20031022
PΙ
     WO 2004039785
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
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IT

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LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
                   OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
                   TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
               RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                   KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
                   FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
                   BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                            A1
           US 2004152896
                                  20040805
                                                 US 2003-699106 20031031
PRAI US 2002-423328P 20021101
      * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
      AB
           The invention provides a new process for the preparation of the well-known
           kappa agonists I via a copper salt-catalyzed amination of an oxazolidinone
           II with an aryl halide III in the presence of an amino ligand and a base
           [wherein A = H, OH and derivs., fluoro/alkyl, etc.; Arl = (un)substituted
           phenyl; Ar2 = (un)substituted Ph, naphthyl, pyridinyl, thiophenyl, furyl,
           pyrrolyl, pyrimidinyl; R1 = alkyl, benzyl, with its Ph part optionally
           substituted; R2, R3 = independently H, (un)substituted alkyl, or R2R3N =
           (un) substituted pyrrolidine, piperidine, morpholine; X = Cl, Br, I]. The
           advantages of the aryl amination include high yields, mild, efficient,
           cost-effective and robust process. For example, aryl amination of
           S-(+)-4-phenyloxazolidin-2-one with 4-bromo-N-propylbenzamide in the
           presence of CuI/K2CO3 gave the intermediate IV, used in the synthesis of
           pyrrolidinyl ethylamine V.
      ST
           pyrrolidinyl ethylamine prepn copper aryl amination
      IT
           Amination
              (aryl; process for preparation of pyrrolidinyl ethylamines via a
              copper-mediated aryl amination)
      IT
           Amination catalysts
              (process for preparation of pyrrolidinyl ethylamines via a copper-mediated
              aryl amination)
      IT
           Amines, preparation
           RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
           (Preparation)
              (products; process for preparation of pyrrolidinyl ethylamines via a
              copper-mediated aryl amination)
      IT
           Aryl halides
           RL: RCT (Reactant); RACT (Reactant or reagent)
              (starting material; process for preparation of pyrrolidinyl ethylamines via
              a copper-mediated aryl amination)
      IT
           686347-77-3P, Benzoic acid 1-[2-[methyl[4-(propylcarbamoyl)phenyl]amino]-2-
           phenylethyl]pyrrolidin-3-yl ester
           RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
           (Preparation)
              (amine product; process for preparation of pyrrolidinyl ethylamines via a
              copper-mediated aryl amination)
      IT
           497-19-8, Sodium carbonate, uses
                                              534-17-8, Cesium carbonate
                                                                           584-08-7,
           Potassium carbonate
           RL: NUU (Other use, unclassified); USES (Uses)
              (base; process for preparation of pyrrolidinyl ethylamines via a
              copper-mediated aryl amination)
      IT
           7681-65-4, Copper iodide (CuI)
                                            7758-89-6, Copper chloride (CuCl)
           7787-70-4, Copper bromide (CuBr)
           RL: CAT (Catalyst use); USES (Uses)
              (catalyst; process for preparation of pyrrolidinyl ethylamines via a
```

686347-72-8P, 4-(2-0xo-4-phenyloxazolidin-3-yl)-N-propylbenzamide

copper-mediated aryl amination)

ΙT

GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,

686347-73-9P, 4-[(2-Hydroxy-1-phenylethyl)amino]-N-propylbenzamide 686347-74-0P, 4-(2-0xo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-N-686347-75-1P, 4-(2,2-Dioxo-4-phenylpropylbenzamide [1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide 686347-76-2P, Benzoic acid 1-[2-phenyl-2-[4-(propylcarbamoyl)phenyl]amino]ethyl]pyrrolidin-3-yl RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) 694-83-7, 1,2-Diaminocyclohexane ΙT RL: CAT (Catalyst use); USES (Uses) (ligand; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) IT 99395-88-7, (S)-(+)-4-Phenyloxazolidin-2-one 99855-14-8, Benzoic acid pyrrolidin-3-yl ester hydrochloride 223557-19-5, 4-Bromo-N-propylbenzamide RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination) ANSWER 4 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN L3RN 572923-17-2 REGISTRY ED Entered STN: 25 Aug 2003 Benzamide, 4-[(4S)-2-oxo-4-phenyl-3-oxazolidinyl]-N-propyl- (9CI) (CA CN INDEX NAME) FS STEREOSEARCH MF C19 H20 N2 O3 SR CA STN Files: CA, CAPLUS, CASREACT DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation) Ring System Data

| Elementa: | l Elemental | Size of | Ring System | n Ring | RID |
|-----------|--------------------|-----------|---------------------|---------------------------------|------------|
| Analysis | Sequence | the Rings | Formula | Identifier | Occurrence |
| EA | ES | | | • | Count |
| C3NO | =+======
 NCOC2 | • | +========
 C3NO | :+=== === -
 16.239.1 | • |
| C6 | C6 | • • | C6 | 46.150.18 | • |

Absolute stereochemistry.

Calculated Properties (CALC)

| PROPERTY (CODE) | VALUE | CONDITION | |
|------------------------------|---------------------|--------------|---------|
| Bioconc. Factor (BCF) | · | • | (1) ACD |
| Bioconc. Factor (BCF) | | . • | (1) ACD |
| Bioconc. Factor (BCF) | | · • | (1) ACD |
| Bioconc. Factor (BCF) | | . • | (1) ACD |
| Bioconc. Factor (BCF) | | • | (1) ACD |
| Boiling Point (BP) | 528.4+/-49.0 deg C | 760.0 Torr | (1) ACD |
| Enthalpy of Vap. (HVAP) | 80.32+/-3.0 kJ/mol | | (1) ACD |
| Flash Point (FP) | 273.3+/-53.7 deg C | 1 | (1) ACD |
| Freely Rotatable Bonds (FRB) | 16 | 1 i | (1) ACD |
| H acceptors (HAC) | 5 | 1 | (1) ACD |
| H donors (HD) | 11 | į l | (1) ACD |
| Koc (KOC) | 397 | pH 1 | (1) ACD |
| Koc (KOC) | · · | | (1) ACD |
| Koc (KOC) | | pH 7 | (1) ACD |
| Koc (KOC) | • | 8 Hq | (1) ACD |
| Koc (KOC) | | · <u>-</u> · | (1) ACD |
| logD (LOGD) | | | (1) ACD |
| logD (LOGD) | | • | (1) ACD |
| logD (LOGD) | | • • | (1) ACD |
| logD (LOGD) | | • • | (1) ACD |
| logD (LOGD) | · | | (1) ACD |
| logP (LOGP) | 2.248+/-0.644 | • | (1) ACD |
| Molar Solubility (SLB.MOL) | | • | (1) ACD |
| Molar Solubility (SLB.MOL) | • | | (1) ACD |
| Molar Solubility (SLB.MOL) | · · | • • | (1) ACD |
| 2 · | • | • • | (1) ACD |
| | • | . • | (1) ACD |
| | 1324.37 | • | (1) ACD |
| Vapor Pressure (VP) | 2.99E-11 Torr | 25.0 deg C | (I) ACD |

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software Solaris V4.76 ((C) 1994-2005 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 139:149559 CA

TI Palladium-Catalyzed Synthesis of N-Aryloxazolidinones from Aryl Chlorides

AU Ghosh, Arun; Sieser, Janice E.; Riou, Maxime; Cai, Weiling; Rivera-Ruiz, Luis

CS Process Research and Development, Pfizer Global Research and Development, Groton, CT, 06340-8013, USA

SO Organic Letters (2003), 5(13), 2207-2210 CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))

AB An efficient method for intermol. N-arylation of oxazolidinones using Pd2dba3 and various phosphine ligands in the presence of a weak base is reported. The conditions allow the use of cheaper aryl chlorides containing functionalities such as enolizable ketones, amides, etc., which would be

June 26,2003 cmpd#23,p2209

have The

incompatible with other coupling methods. The coupling reaction can be used to prepare enantiopure N-aryl β -amino alcs. Depending on the stereoelectronic nature of the aryl chloride, careful choice of ligand was necessary for the success of these reactions. oxazolidinone arylation aryl chloride phosphine palladium catalyst; aryloxazolidinone prepn hydrolysis; arylaminoalkanol prepn Alcohols, preparation RL: SPN (Synthetic preparation); PREP (Preparation) (amino; palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) Aryl halides RL: RCT (Reactant); RACT (Reactant or reagent) (aryl chlorides; palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) Chlorides, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (aryl; palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) Arylation Arylation catalysts (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) 51364-51-3 213697-53-1 224311-51-7, 2-Di-tert-butylphosphino-1,1'biphenyl 247940-06-3, 2-Dicyclohexylphosphino-1,1'-biphenyl RL: CAT (Catalyst use); USES (Uses) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) 98-56-6, 1-Chloro-4-trifluoromethylbenzene 99-02-5 99-91-2 1-Chloro-4-nitrobenzene 104-88-1, 4-Chlorobenzaldehyde, reactions 106-43-4, 4-Chlorotoluene 108-90-7, Chlorobenzene, reactions 4-Chlorobenzonitrile 623-12-1, 4-Chloroanisole 873-32-5, 2-Chlorobenzonitrile 1126-46-1, Methyl 4-chlorobenzoate 2845-89-8, 4042-35-7, (S) -4-Methyl-2-oxazolidinone 3-Chloroanisole 7461-32-7. 4-Chloro-N-propylbenzamide 13896-06-5, (S)-4-Ethyl-2-oxazolidinone 16112-59-7, 4-Methyl-2-oxazolidinone 17016-83-0, (S)-4-Isopropyl-2-oxazolidinone 99395-88-7, (+)-4-Phenyl-2-oxazolidinone 102029-44-7, (+)-4-Benzyl-2-oxazolidinone 572923-34-3 572923-35-4 RL: RCT (Reactant); RACT (Reactant or reagent) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) 572922-97-5P 572922-96-4P 572922-98-6P 572922-99-7P 572923-05-8P 572923-06-9P 572923-11-6P 572923-12-7P 572923-07-0P 572923-10-5P 572923-18-3P 572923-20-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) 534-17-8, Cesium carbonate RL: RGT (Reagent); RACT (Reactant or reagent) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) 135285-98-2P 413190-46-2P 572923-00-3P 572923-01-4P 572923-02-5P 572923-03-6P 572923-04-7P 572923-08-1P 572923-09-2P 572923-13-8P 572923-14-9P 572923-15-0P 572923-16-1P 572923-17-2P 572923-19-4P 572923-21-8P 572923-22-9P 572923-23-0P 572923-24-1P 572923-25-2P 572923-26-3P 572923-27-4P 572923-28-5P 572923-29-6P 572923-30-9P 572923-31-0P 572923-32-1P 572923-33-2P RL: SPN (Synthetic preparation); PREP (Preparation) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.) THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD

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| CA SUBSCRIBER PRICE | -2.72 | -2.72 |
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ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:390234 CAPLUS

DOCUMENT NUMBER:

140:406800

TITLE:

Methods for preparing N-aryl oxazolidinones via a

copper catalyzed cross coupling reaction

INVENTOR(S):

Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA PCT Int. Appl., 28 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA' | ENT I | NO. | | | KIND DATE | | | | 1 | APPL: | | DATE | | | | | |
|------|-------|------|------|-----|-----------|-----|------|------|-----|-------|------|------|----------|-----|-----|------|-----|
| WO | 2004 | 0397 | 88 | | A1 | - : | 2004 | 0513 | | WO 2 | 003- | | 20031022 | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
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| | | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NI, | NO, | NZ, |
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| US | 2004 | 1222 | 26) | | A1 | | 2004 | 0624 | 1 | US 2 | 003- | 6457 | 79 | | 2 | 0030 | 821 |
| RITY | APP | LN. | info | .: | | | | | 1 | US 2 | 002- | 4233 | 28P | 1 | P 2 | 0021 | 101 |
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OTHER SOURCE(S):

MARPAT 140:406800

$$R^2$$
 N
 Ar

AB Methods for the preparation of N-aryl oxazolidinones (shown as I; variables defined below; e.g. (R)-4-ethyl-3-(4-trifluoromethylphenyl)oxazolidin-2one (II)) via a Cu catalyzed cross coupling reaction are disclosed. These compds. are intermediates useful in the preparation of cholesteryl ester transfer protein inhibitors. Preferred catalyst ligands are MeNHCH2CH2NHMe and 1,2-diaminocyclohexane. For example, II was prepared by charging K2CO3 (87 mmol) and CuI (4.4 mmol) to a flask under N2 and adding (R)-4-ethyloxazolidin-2-one (43.5 mmol) and 1-bromo-4trifluoromethylbenzene (42.8 mmol) each diluted in 20 mL dioxane to the flask followed by 1,2-diaminocyclohexane (4.4 mmol); the bright blue mixture was heated to 110° and held for 22 h; workup gave 86 % product. Further examples describe the conversion of II to (R)-2-(4trifluoromethylphenylamino)butan-1-ol (97 %), (R)-4-ethyl-3-(4trifluoromethylphenyl)-[1,2,3]oxathiazolidine 2-oxide (81 %) and finally (R)-3-(4-trifluoromethylphenylamino)pentanenitrile (81 %). Six addnl. examples of preparation of I are included. For I: R1 is a partially saturated, fully saturated or fully unsatd. (C1-C4) straight or branched C chain wherein the carbons, other than the connecting C, may optionally be replaced with one heteroatom = O, S and N wherein said C atoms are optionally mono, dior trisubstituted independently with halo, said C is optionally monosubstituted with oxo or hydroxy, said S is optionally mono- or disubstituted with oxo, said N is optionally mono- or disubstituted with oxo; or said R1 is a partially saturated, fully saturated or fully unsatd. 3-5-membered ring optionally having one heteroatom = O, S and N; wherein said R1 ring is optionally mono, di- or trisubstituted independently with halo, (C1-C6)alkoxy, nitro, (C1-C4)alkyloxycarbonyl. R2 is H, C1-C4 alkyl, C3-C6 cycloalkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl; Ph (un)substituted with C1-C6 alkoxy or OY wherein Y is a hydroxy protecting group, halogen, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl, trifluoromethyl, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyl, or cyano; or benzyl with the Ph moiety of the benzyl (un) substituted with C1-C6 alkoxy or OY wherein Y is a hydroxy protecting group, halogen, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy-C1-C4 alkyl, trifluoromethyl, amido, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyl or cyano; wherein Ar is an aromatic hydrocarbon or heteroarom. moiety Ph, naphthyl, pyridyl, thiophenyl, furanyl, pyrrolyl and pyrimidyl, imidazolyl, oxazolyl, thiazolyl, triazolyl, pyrazolyl, pyrazinyl, pyridazinyl each of which may be (un) substituted by ≥ 1 , preferably 1-2, substituents = halo, hydroxy, C1-C4 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C4 alkoxy, C1-C4 alkoxy-C1-C4 alkyl, CF3, amino, amido, imines, nitro, carbo-C1-C4 alkoxy, C1-C4 alkoxycarbonyl, carbonyls (ketones and aldehydes), cyano. IT

686347-72-8P, 3-[4-[(Propylamino)carbonyl]phenyl]-4-

phenyloxazolidin-2-one

RL: SPN (Synthetic preparation); PREP (Preparation) (methods for preparing N-aryl oxazolidinones via copper catalyzed cross coupling reaction)

RN 686347-72-8 CAPLUS

CN

Benzamide, 4-(2-oxo-4-phenyl-3-oxazolidinyl)-N-propyl- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:390231 CAPLUS

DOCUMENT NUMBER:

140:391196

TITLE:

Process for the preparation of pyrrolidinyl ethylamine

our app

compounds via a copper-mediated aryl amination

INVENTOR(S):

Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel

PATENT ASSIGNEE(S): SOURCE:

Pfizer Products Inc., USA PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATE | ENT 1 | .OV | | | KIND DATE | | | | APPLICATION NO. | | | | | | DATE | | | |
|-----------|-------|-------|------|-----|-----------|-------------------|------|------|-----------------|------|------|-------|-----|------------|------|------|-----|--|
| WO 2 | 2004 | 0397 | 85 | | A1 | | 2004 | 0513 | 1 | WO 2 | 003- | IB46' | 76 | | 20 | 0031 | 022 | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | GE, | |
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| | | LR, | LS, | LT, | LU, | LV, | ΜA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NI, | NO, | NZ, | |
| | | OM, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | ТJ, | TM, | TN, | |
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| | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, | |
| | | KG, | KZ, | MD, | RU, | ТJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | |
| | | FI, | FR, | GB, | GR, | HU, | ΙE, | ΙΤ, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, | |
| | | BF, | ΒÌ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | |
| (US 2 | 2004 | 1528 | 96 | | A1 | | 2004 | 0805 | 1 | US 2 | 003- | 6991 | 06 | | 20 | 0031 | 031 | |
| PRYORITY | APP | LN. : | INFO | .: | | | | | US 2002-423328P | | | | | P 20021101 | | | | |
| OTHÈR~SOU | JRCE | (S): | | | MAR | MARPAT 140:391196 | | | | | | | | | | | | |
| GI | | | | | | | | | | | | | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a new process for the preparation of the well-known kappa agonists I via a copper salt-catalyzed amination of an oxazolidinone II with an aryl halide III in the presence of an amino ligand and a base [wherein A = H, OH and derivs., fluoro/alkyl, etc.; Arl = (un)substituted phenyl; Ar2 = (un)substituted Ph, naphthyl, pyridinyl, thiophenyl, furyl, pyrrolyl, pyrimidinyl; R1 = alkyl, benzyl, with its Ph part optionally substituted; R2, R3 = independently H, (un)substituted alkyl, or R2R3N = (un)substituted pyrrolidine, piperidine, morpholine; X = Cl, Br, I]. The advantages of the aryl amination include high yields, mild, efficient, cost-effective and robust process. For example, aryl amination of S-(+)-4-phenyloxazolidin-2-one with 4-bromo-N-propylbenzamide in the

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presence of CuI/K2CO3 gave the intermediate IV, used in the synthesis of pyrrolidinyl ethylamine V.

TT 686347-72-8P, 4-(2-0xo-4-phenyloxazolidin-3-yl)-N-propylbenzamide
686347-74-0P, 4-(2-0xo-4-phenyl-[1,2,3]oxathiazolidin-3-yl)-Npropylbenzamide 686347-75-1P, 4-(2,2-Dioxo-4-phenyl[1,2,3]oxathiazolidin-3-yl)-N-propylbenzamide
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination)

RN 686347-72-8 CAPLUS

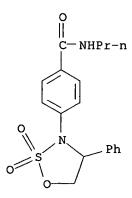
CN Benzamide, 4-(2-oxo-4-phenyl-3-oxazolidinyl)-N-propyl- (9CI) (CA INDEX NAME)

RN 686347-74-0 CAPLUS

CN Benzamide, 4-(2-oxido-4-phenyl-1,2,3-oxathiazolidin-3-yl)-N-propyl- (9CI) (CA INDEX NAME)

RN 686347-75-1 CAPLUS

CN Benzamide, 4-(2,2-dioxido-4-phenyl-1,2,3-oxathiazolidin-3-yl)-N-propyl-(9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:397213 CAPLUS

DOCUMENT NUMBER: 139:149559

TITLE: Palladium-Catalyzed Synthesis of N-Aryloxazolidinones

from Aryl Chlorides

AUTHOR(S): Ghosh, Arun; Sieser, Janice E.; Riou, Maxime; Cai,

Weiling; Rivera-Ruiz, Luis

CORPORATE SOURCE: Process Research and Development, Pfizer Global

Research and Development, Groton, CT, 06340-8013, USA

SOURCE: Organic Letters (2003), 5(13), 2207-2210

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:149559

AB An efficient method for intermol. N-arylation of oxazolidinones using Pd2dba3 and various phosphine ligands in the presence of a weak base is reported. The conditions allow the use of cheaper aryl chlorides containing functionalities such as enolizable ketones, amides, etc., which would be incompatible with other coupling methods. The coupling reaction can be used to prepare enantiopure N-aryl β -amino alcs. Depending on the stereoelectronic nature of the aryl chloride, careful choice of ligand was necessary for the success of these reactions.

IT 572923-17-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (palladium-catalyzed synthesis of N-aryloxazolidinones from aryl chlorides and hydrolysis to arylamino alcs.)

RN 572923-17-2 CAPLUS

CN Benzamide, 4-[(4S)-2-oxo-4-phenyl-3-oxazolidinyl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Jank,

REFERENCE COUNT:

46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

| => FIL STNGUIDE | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 15.27 | 202.92 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -2.19 | -4.91 |

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jan 14, 2005 (20050114/UP).

| => fil beilstein | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.06 | 202.98 |
| | | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| • | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -4.91 |

FILE 'BEILSTEIN' ENTERED AT 19:21:00 ON 21 JAN 2005 COPYRIGHT (c) 2005 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE RELOADED ON OCTOBER 20, 2002 FILE LAST UPDATED ON NOVEMBER 3, 2004

FILE COVERS 1771 TO 2004.

*** FILE CONTAINS 9,073,068 SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally

with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

- * PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.
- * SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE
- * ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE
- * ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.
- * FOR PRICE INFORMATION SEE HELP COST

NEW

- * PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.
- * NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.

=> s L4

L5 0 L3

=> fil caold

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE

0.00 -4.91

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s L4

L6 0 L3

=> fil casreact

| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.43 | 203.55 |
| | | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -4.91 |
| | | |

FILE 'CASREACT' ENTERED AT 19:21:49 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE CONTENT: 1840 - 16 Jan 2005 VOL 141 ISS 20

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s L4
L7 1 L3
```

=> d L7 ibib abs hitstr
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

```
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE, Single-step Reactions
APPS ----- AI, PRAI
BIB ---- AN, plus Bibliographic Data
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels IBIB ----- BIB, indented with text labels
IND ----- Indexing data
IPC ----- International Patent Classifications
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels
SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
MAX ----- Same as ALL
PATS ----- PI, SO
SCAN ----- TI and FCRD (random display, no answer number. SCAN
            must be entered on the same line as DISPLAY, e.g.,
             D SCAN.)
SSRX ----- Single-Step Reactions (Map, Diagram, and Summary for
            all single-step reactions)
STD ----- BIB, IPC, and NCL
CRD ----- Compact Display of All Hit Reactions
CRDREF ---- Compact Reaction Display and SO, PY for Reference
```

,

FHIT ---- Reaction Map, Diagram, and Summary for first hit reaction FHITCBIB --- FHIT, AN plus CBIB FCRD ----- First hit in Compact Reaction Display (CRD) format FCRDREF ---- First hit in Compact Reaction Display (CRD) format with CA reference information (SO, PY). (Default) FPATH ----- PATH, plus Reaction Summary for the "long path" FSPATH ---- SPATH, plus Reaction Summary for the "short path" HIT ----- Reaction Map, Reaction Diagram, and Reaction Summary for all hit reactions and fields containing hit terms OCC ----- All hit fields and the number of occurrences of the hit terms in each field. Includes total number of HIT, PATH, SPATH reactions. Labels reactions that have incomplete verifications. PATH ----- Reaction Map and Reaction Diagram for the "long path". Displays all hit reactions, except those whose steps are totally included within another hit reaction which is displayed RX ----- Hit Reactions (Map, Diagram, Summary for all hit reactions) RXG ----- Hit Reaction Graphics (Map and Diagram for all hit reactions) RXL ----- Hit Reaction Long (Map, Diagram, Summary for all hit reactions) RXS ----- Hit Reaction Summariers (Map and Summary for all hit reactions) SPATH ---- Reaction Map and Reaction Diagram for the "short path". Displays all single step reactions which contain a hit substance. Also displays those

multistep reactions that have a hit substance in both the first and last steps of the reaction, except for those hit reactions whose steps are totally included within another hit reaction which is displayed

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of combinations include: D TI;
D BIB RX; D TI, AU, FCRD. The information is displayed in the same order as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH, FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may be used with the DISPLAY command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (FCRDREF): ibib

ANSWER 1 OF 1 CASREACT COPYRIGHT 2005 ACS on STN

139:149559 CASREACT ACCESSION NUMBER:

TITLE: Palladium-Catalyzed Synthesis of N-Aryloxazolidinones

from Aryl Chlorides

Ghosh, Arun; Sieser, Janice E.; Riou, Maxime; Cai, AUTHOR(S):

Weiling; Rivera-Ruiz, Luis

CORPORATE SOURCE: Process Research and Development, Pfizer Global

Research and Development, Groton, CT, 06340-8013, USA

Organic Letters (2003), 5(13), 2207-2210 SOURCE:

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

46 REFERENCE COUNT: THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log yCOST IN U.S. DOLLARS

TOTAL SINCE FILE ENTRY SESSION

FULL ESTIMATED COST 29.16 232.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION
CA SUBSCRIBER PRICE 0.00 -4.91

STN INTERNATIONAL LOGOFF AT 19:22:45 ON 21 JAN 2005

Connecting via Winsock to STN

106991069

Welcome to STN International! Enter x:x

LOGINID: SSSPTAAJP1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

G1=5,C G2=16,HeP

```
* * * * * * * * * * Welcome to STN International
```

```
Web Page URLs for STN Seminar Schedule - N. America
NEWS
     1
NEWS
      2
                 "Ask CAS" for self-help around the clock
NEWS
         SEP 01 New pricing for the Save Answers for SciFinder Wizard within
                 STN Express with Discover!
         OCT 28
                 KOREAPAT now available on STN
NEWS
NEWS
         NOV 30 PHAR reloaded with additional data
      5
         DEC 01
                 LISA now available on STN
NEWS
      6
         DEC 09 12 databases to be removed from STN on December 31, 2004
NEWS
     7
NEWS
         DEC 15 MEDLINE update schedule for December 2004
NEWS
         DEC 17
                 ELCOM reloaded; updating to resume; current-awareness
                 alerts (SDIs) affected
      10 DEC 17
                 COMPUAB reloaded; updating to resume; current-awareness
NEWS
                 alerts (SDIs) affected
NEWS
      11 DEC 17
                 SOLIDSTATE reloaded; updating to resume; current-awareness
                 alerts (SDIs) affected
NEWS
      12 DEC 17
                 CERAB reloaded; updating to resume; current-awareness
                 alerts (SDIs) affected
      13 DEC 17
                 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS
NEWS
      14 DEC 30
                 EPFULL: New patent full text database to be available on STN
      15 DEC 30
                 CAPLUS - PATENT COVERAGE EXPANDED
NEWS
NEWS
     16 JAN 03
                 No connect-hour charges in EPFULL during January and
                 February 2005
                 CA/CAPLUS - Expanded patent coverage to include Russia
NEWS
      17 JAN 11
                 (Federal Institute of Industrial Property)
```

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 19:09:19 ON 21 JAN 2005

=> fil reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 19:09:28 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0 DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

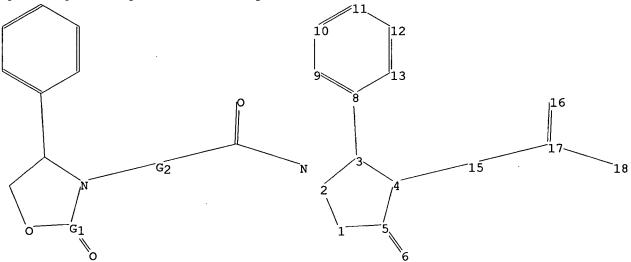
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>

Uploading C:\Program Files\Stnexp\Queries\10699106c.str



chain nodes : 6 15 16 17 18 ring nodes : 1 2 3 4 5 8 9 10 11 chain bonds : 3-8 4-15 5-6 15-17 16-17 17-18 ring bonds : 4-5 1-2 1-5 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13 exact/norm bonds : 1-2 1-5 2-3 3-4 3-8 4-15 5-6 15-17 16-17 17-18 4-5 normalized bonds : 8-9 8-13 9-10 10-11 11-12 12-13

G1:C,S

G2:Ph,Hy

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS

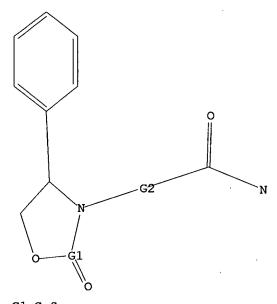
L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1

STR



G1 C,S G2 Ph,Hy

Structure attributes must be viewed using STN Express query preparation.

=> s L1

SAMPLE SEARCH INITIATED 19:10:02 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 299 TO ITERATE

100.0% PROCESSED 299 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

4943 TO 7017

PROJECTED ANSWERS:

0 TO 0

L2 0 SEA SSS SAM L1

=> s L1 full

FULL SEARCH INITIATED 19:10:07 FILE 'REGISTRY'

100.0% PROCESSED 5770 ITERATIONS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> fil casreact
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 162.19 162.40

0 ANSWERS

FULL ESTIMATED COST

FILE 'CASREACT' ENTERED AT 19:11:12 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE CONTENT: 1840 - 16 Jan 2005 VOL 141 ISS 20

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> Uploading C:\Program Files\Stnexp\Queries\10699106c.str

chain nodes : 6 15 16 17 18 ring nodes :

1 2 3 4 5 8 9 10 11 12 13

chain bonds :

3-8 4-15 5-6 15-17 16-17 17-18 ring bonds:
1-2 1-5 2-3 3-4 4-5 8-9 8-13 9-10 10-11 11-12 12-13 exact/norm bonds:
1-2 1-5 2-3 3-4 3-8 4-5 4-15 5-6 15-17 16-17 17-18 normalized bonds:
8-9 8-13 9-10 10-11 11-12 12-13

G1:C,S

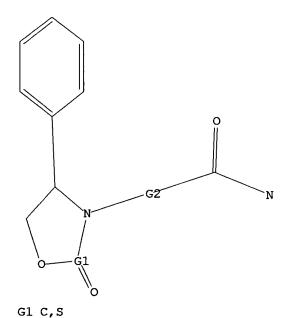
G2: Ph, Hy

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS

L4 STRUCTURE UPLOADED

=> d L4 HAS NO ANSWERS L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L4

SAMPLE SEARCH INITIATED 19:11:37 FILE 'CASREACT'

SCREENING COMPLETE - 440 REACTIONS TO VERIFY FROM 26 DOCUMENTS

100.0% DONE 440 VERIFIED 0 HIT RXNS 0 DOCS

SEARCH TIME: 00.00.01

G2 Ph, Hy

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 7543 TO 10057

PROJECTED ANSWERS:

0 TO

O SEA SSS SAM L4 (O REACTIONS) L5

=> s L4 full

FULL SEARCH INITIATED 19:11:45 FILE 'CASREACT'

SCREENING COMPLETE - 10457 REACTIONS TO VERIFY FROM 585 DOCUMENTS

100.0% DONE 10457 VERIFIED 0 HIT RXNS 0 DOCS

SEARCH TIME: 00.00.01

0 SEA SSS FUL L4 (0 REACTIONS)

=> index structure

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSECTION 53 268.93 FULL ESTIMATED COST 106.53

INDEX 'BEILSTEIN, CASREACT, CHEMINFORMRX, DJSMONLINE, DRUGU, GMELIN, MARPAT, MARPATPREV, PS, REGISTRY' ENTERED AT 19:11:57 ON 21 JAN 2005

10 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s L4

SUBSTANCE SEARCHES NOT VALID IN INDEX Substance searches are not available in index.

=> fil qmelin

SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 0.59 269.52

FILE 'GMELIN' ENTERED AT 19:12:14 ON 21 JAN 2005 COPYRIGHT (C) 2005 MDL Information Systems GmbH

FILE LAST UPDATED: 03 MAY 97 - 21 MAY 97 <970503/UP -970521/UP>

- >>> CAS REGISTRY NUMBERS FOR 171,499 SUBSTANCES AVAILABLE <<<
- >>> FILE CONTAINS 1,070,350 SUBSTANCES <<<
- >>> PLEASE NOTE THAT AFTER A SEARCH IN SSTA FIELDS DIS ORD OR DIS HIT CAN BE VERY LENGTHY. <<<

- * SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR PREDEFINED *
- * FORMATS ARE BASED ON THE SUM OF ALL FIELDS POSSIBLE. THEREFORE;
- * THESE ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.

* FOR PRICE INFORMATION SEE HELP COST.

0 ANSWERS

=> s L4

SAMPLE SEARCH INITIATED 19:12:18 FILE 'GMELIN' SAMPLE SCREEN SEARCH COMPLETED -0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

0 TO 0 0 TO 0

PROJECTED ANSWERS:

L7

0 SEA SSS SAM L4

=> s L4 full

FULL SEARCH INITIATED 19:12:30 FILE 'GMELIN'

FULL SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.03

0 SEA SSS FUL L4

=> log y

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 15.02 284.54 FULL ESTIMATED COST

STN INTERNATIONAL LOGOFF AT 19:13:09 ON 21 JAN 2005

Connecting via Winsock to STN

1/21/01 106991066.

Welcome to STN International! Enter x:x

LOGINID: SSSPTAAJP1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

Arniline search

* * * * * * Welcome to STN International

Web Page URLs for STN Seminar Schedule - N. America NEWS NEWS "Ask CAS" for self-help around the clock NEWS SEP 01 New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! OCT 28 KOREAPAT now available on STN NEWS PHAR reloaded with additional data NEWS NOV 30 NEWS 6 DEC 01 LISA now available on STN NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004 NEWS DEC 15 MEDLINE update schedule for December 2004 DEC 17 NEWS ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected 12 DEC 17 NEWS CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN NEWS 15 DEC 30 NEWS CAPLUS - PATENT COVERAGE EXPANDED 16 JAN 03 NEWS No connect-hour charges in EPFULL during January and February 2005 17 JAN 11 CA/CAPLUS - Expanded patent coverage to include Russia NEWS (Federal Institute of Industrial Property)

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 18:15:09 ON 21 JAN 2005

=> fil reg COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION ENTRY 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 18:15:29 ON 21 JAN 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0 DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

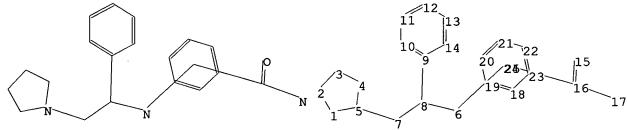
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading C:\Program Files\Stnexp\Queries\10699106a.str



chain nodes : 6 7 8 15 16 17 ring nodes: chain bonds :

1 2 3 4 5 9 10 11 12 13 14 18 19 20 21 22 23

5-7 6-8 7-8 8-9 15-16 16-17

ring bonds :

1-2 1-5 2-3 3-4 4-5 9-10 9-14 10-11 11-12 12-13 13-14

19-20 20-21 21-22 22-23

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 5-7 6-8 15-16 16-17

exact bonds :

7-8 8-9

normalized bonds :

9-10 9-14 10-11 11-12 12-13 13-14 18-19 18-23 19-20 20-21 21-22 22-23

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS

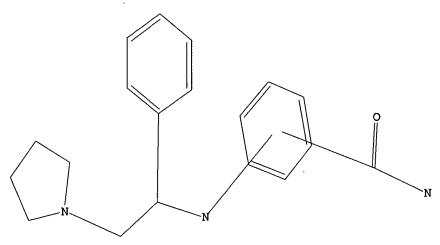
STRUCTURE UPLOADED L1

=> d

, 13

L1 HAS NO ANSWERS

STR L1



Structure attributes must be viewed using STN Express query preparation.

7 ANSWERS

147 ANSWERS

=> s L1

SAMPLE SEARCH INITIATED 18:15:53 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 1356 TO ITERATE

73.7% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 24911 TO 29329 7 TO 373

PROJECTED ANSWERS:

7 SEA SSS SAM L1

=> s L1 full

L2

FULL SEARCH INITIATED 18:16:00 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 26680 TO ITERATE

100.0% PROCESSED 26680 ITERATIONS

SEARCH TIME: 00.00.01

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COST IN U.S. DOLLARS SINCE FILE TOTAL FULL ESTIMATED COST ENTRY SESSION 161.33 161.54

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FILE COVERS 1907 - 21 Jan 2005 VOL 142 ISS 5 FILE LAST UPDATED: 20 Jan 2005 (20050120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:390231 CAPLUS

DOCUMENT NUMBER:

140:391196

TITLE:

Process for the preparation of pyrrolidinyl ethylamine

compounds via a copper-mediated aryl amination

INVENTOR(S):

Caron, Stephane; Ghosh, Arun; Sieser, Janice Ethel Pfizer Products Inc., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | CENT 1 | KIND DATE | | | | i | APPL | CAT | DATE | | | | | | | | |
|----------|--------|-----------|-------|-----|------------|-----|-------|-------|------|-------|-------|-------|--------|-----|-----|------|-----|
| WO | 20040 | 3978 | 35 | | A1 | _ | 20040 | 0513 | | WO 20 | 003- | [B46] |
76 | | 20 | 0031 | 022 |
| | W: | ΑĒ, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FΙ, | GB, | GD, | GE, |
| | | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, |
| | | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | ΝZ, |
| | | OM, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | TJ, | TM, | TN, |
| | | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | ТJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| US | 2004 | 15289 | 96 | | A 1 | | 2004 | 0805 | Ţ | JS 20 | 003-6 | 5991 | 06 | | 20 | 0031 | 031 |
| PRIORITY | APP | LN. | INFO. | . : | | | | | Ţ | JS 20 | 002-4 | 1233 | 28P | F | 2 (| 0021 | 101 |
| OTHER SO | OURCE | (S): | | | MAR | TAS | 140:3 | 39119 | 96 | | | | | | | | |

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- The invention provides a new process for the preparation of the well-known kappa agonists I via a copper salt-catalyzed amination of an oxazolidinone II with an aryl halide III in the presence of an amino ligand and a base [wherein A = H, OH and derivs., fluoro/alkyl, etc.; Arl = (un)substituted phenyl; Ar2 = (un)substituted Ph, naphthyl, pyridinyl, thiophenyl, furyl, pyrrolyl, pyrimidinyl; R1 = alkyl, benzyl, with its Ph part optionally substituted; R2, R3 = independently H, (un)substituted alkyl, or R2R3N = (un)substituted pyrrolidine, piperidine, morpholine; X = Cl, Br, I]. The advantages of the aryl amination include high yields, mild, efficient, cost-effective and robust process. For example, aryl amination of S-(+)-4-phenyloxazolidin-2-one with 4-bromo-N-propylbenzamide in the presence of CuI/K2CO3 gave the intermediate IV, used in the synthesis of pyrrolidinyl ethylamine V.

(amine product; process for preparation of pyrrolidinyl ethylamines via a copper-mediated aryl amination)

RN 686347-77-3 CAPLUS

CN Benzamide, 4-[[2-[3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-(9CI) (CA INDEX NAME)

RN 686347-76-2 CAPLUS

CN

Benzamide, 4-[[2-[3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:877272 CAPLUS

DOCUMENT NUMBER: 140:111217

TITLE: Efficient synthesis of the κ -opioid receptor

agonist CJ-15,161: four stereospecific inversions at a

single aziridinium stereogenic center

AUTHOR(S): Couturier, Michel; Tucker, John L.; Andresen, Brian

M.; DeVries, Keith M.; Vanderplas, Brian C.; Ito,

Fumitaka

CORPORATE SOURCE: Chemical Research & Development, Pfizer Inc., Groton,

CT, 06340, USA

SOURCE: Tetrahedron: Asymmetry (2003), 14(22), 3517-3523

CODEN: TASYE3; ISSN: 0957-4166

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:111217

GΙ

AB An efficient four-step sequence has been developed for the synthesis of the κ -opioid receptor agonist I (CJ-15,161). The process features four consecutive regionselective and stereospecific inversions at a single aziridinium stereogenic center, which leads to overall retention of stereochem., in a single operation. The chemical is straightforward, practical and amenable to large-scale synthesis. Crystal structure of suitable for formulation polymorph benzoate salt form of I is also reported.

Ι

IT 646041-98-7 RL: PRP (Properties) (crystal structure; large-scale synthesis of κ -opioid receptor agonist, (arylamino) (phenyl) ethyl pyrrolidinol) RN646041-98-7 CAPLUS CN Benzamide, 4-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl-, monobenzoate (salt), monohydrate (9CI) (CA INDEX NAME) CM 1 204970-97-8 CRN CMF C23 H31 N3 O2

Absolute stereochemistry. Rotation (+).

CM 2

4)

CRN 65-85-0 CMF C7 H6 O2

IT 473916-34-6P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (large-scale synthesis of κ -opioid receptor agonist, (arylamo) (phenyl) ethyl pyrrolidinol)

RN 473916-34-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 204970-97-8P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(large-scale synthesis of κ -opioid receptor agonist,

(arylamino) (phenyl) ethyl pyrrolidinol)

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:696867 CAPLUS

DOCUMENT NUMBER: 139:230618

TITLE: Preparation of crystalline anhydrous and monohydrate

benzoate salts of (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-

4-[(N-propylamino)carbonyl]phenyl]amino-2-phenyl]ethylpyrrolidine as κ -opioid receptor

agonists

INVENTOR(S): Quallich, George Joseph; Castaldi, Michael James

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN Prod. ODE

| PAT | CENT | NO. | | | KIND DATE | | | | į | | ICAT | DATE | | | | | |
|-------|-------|------|------|-----|------------|-----|------|------|-----------------|------|------|------|-----|-----|------------|------|-----|
| WO | 2003 | 0725 | 44 | | A1 | _ | 2003 | 0904 | 1 | | | | | | 2 | 0030 | 217 |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, |
| | | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | ТJ, | TM, | ΑT, | BE, | ВG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | SI, | SK, | TR, | BF, |
| | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | G₩, | ML, | MR, | ΝE, | SN, | TD, | TG | |
| EΡ | 1478 | 622 | | | A 1 | | 2004 | 1124 | | EP 2 | 003- | 7428 | 80 | | 2 | 0030 | 217 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | |
| US | 2004 | 2359 | 36 | | A 1 | | 2004 | 1125 | 1 | US 2 | 003- | 4212 | 09 | | 2 | 0030 | 423 |
| ORITY | (APP | LN. | INFO | .: | | | | | US 2002-360250P | | | | | : | P 20020228 | | |
| | | | | | | | | | 1 | wo 2 | 003- | IB56 | 0 | Ī | <i>N</i> 2 | 0030 | 217 |

App # GI

AB A process for preparing an anhydrous crystalline benzoate salt of (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]amin o-2-phenyl]ethylpyrrolidine (I) and the corresponding I crystalline benzoate monohydrate is described which comprises: salifying (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]amino-2-phenyl]ethylpyrrolidine with benzoic acid in the presence of an alkyl alc. (e.g., 2-propanol), and isolating the anhydrous I salt (X-ray diffraction data is presented). The crystalline monohydrate benzoate salt of (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]amin o-2-phenyl]ethylpyrrolidine is prepared by: treating anhydrous I with an aqueous

Ι

alkanol solution; and isolating the crystallization I monohydrate (X-ray diffraction

data is presented). These benzoate salts are selective kappa-receptor agonists, and are useful as analgesics, anesthetics, anti-inflammatory or neuroprotective agents, or in the treatment of arthritis, stroke or functional bowel disease (all no data).

IT 591769-11-8P

CN

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of crystalline anhydrous and monohydrate benzoate salts of (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]a mino-2-phenyl]ethylpyrrolidine as κ -opioid receptor agonists)

RN 591769-11-8 CAPLUS

Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, compd. with phenol (1:1) (9CI) (CA

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INDEX NAME)
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CM 1

CRN 204970-97-8 CMF C23 H31 N3 O2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 108-95-2 CMF C6 H6 O

IT 591769-12-9P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of crystalline anhydrous and monohydrate benzoate salts of
 (2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]a
 mino-2-phenyl]ethylpyrrolidine as κ-opioid receptor agonists)

RN 591769-12-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, compd. with phenol (1:1), monohydrate (9CI) (CA INDEX NAME)

CM 1

CRN 204970-97-8 CMF C23 H31 N3 O2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 108-95-2 CMF C6 H6 O

IT 204970-97-8

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of crystalline anhydrous and monohydrate benzoate salts of $(2'S,3S)-3-hydroxy-N-[2-[N-methyl-N-4-[(N-propylamino)carbonyl]phenyl]a mino-2-phenyl]ethylpyrrolidine as <math>\kappa$ -opioid receptor agonists)

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:833565 CAPLUS

DOCUMENT NUMBER: 137:337777

TITLE:

Preparation of hydroxypyrrolidinyl ethylamine

compounds useful as selective κ -opioid receptor

agonists

INVENTOR(S):

Devries, Keith M.; Couturier, Michel A.; Andresen,

Brian M.; Tucker, John L.; Ito, Fumitaka

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

GI

U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | PATENT NO. | | | | | | | | | APPLICATION NO. | | | | | | DATE | | | |
|---------|------------|------|------|-----|-------------|------|------|------|------|-----------------|------|------|------|-----|----------|------|-----|--|--|
| | 2002 | | | | | | 2002 | 1031 | | | | | | | 2 | 0020 | 426 | | |
| US | 6624 | 313 | | | B2 20030923 | | | | | | | | | | | | | | |
| WO | 2002 | 0880 | 82 | | A2 | | 2002 | 1107 | , | WO 2 | 002- | IB92 | 4 | | 2 | 0020 | 325 | | |
| WO | 2002 | 0880 | 82 | | A 3 | | 2004 | 0521 | | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | | |
| | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | | |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | ΚP, | KR, | KZ, | LC, | LK, | LR, | | |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | | |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | ΤZ, | | |
| | | UA, | ŪĠ, | US, | UZ, | VN, | ΥU, | ZA, | ZM, | ZW | | | | | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | ŪĠ, | ZM, | ZW, | AM, | ΑZ, | BY, | | |
| | • | KG, | ΚZ, | MD, | RU, | ТJ, | TM, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, | | |
| | | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | | |
| • | | • | ~. | | • | • | NE, | • | | | | | | | | | | | |
| BR | 2002 | 0092 | 70 | | Α | | 2004 | 0615 | | BR 2 | 002- | 9270 | | | 2 | 0020 | 325 | | |
| EP | 1461 | 317 | | | A2 | | 2004 | 0929 | | EP 2 | 002- | 7169 | 61 | | 20020325 | | | | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | | |
| • | | IE, | FI, | CY, | TR | | | | | | | | | | | | | | |
| PRIORIT | Y APP | LN. | INFO | .: | | | | | | US 2 | 001- | 2874 | 28P | | P 2 | 0010 | 430 | | |
| | | | | | | | | | • | US 2 | 001- | 3140 | 06P | | P 2 | 0010 | 821 | | |
| | | | | | | | | | | | 002- | | | | W 2 | 0020 | 325 | | |
| OTHER S | OURCE | (S): | | | CAS | REAC | T 13 | 7:33 | 7777 | ; MA | RPAT | 137 | :337 | 777 | | | | | |

AB Hydroxypyrrolidinyl ethylamine compds. [I; wherein R1 = H, OH, (C1-C4) alkyl, (C1-C4) alkoxy, etc.; R2, R3, independently = H, (C1-C4) alkyl; Ar1, Ar2, independently = aryl, and particularly phenyl] were prepared For example, (2'S,3S)-3-benzoyloxy-N-{2-[N-methyl-N-4-(Npropylaminocarbonyl)phenyl]amino-2-phenyl}ethylpyrrolidine was prepared by a multistep synthetic procedure. The compds. are useful as selective κ -opioid receptor agonists. In fact, some of the title compds. showed a potent IC50 value against kappa-receptor in the range of 0.01 to 100 nM.

IT 204970-97-8P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydroxypyrrolidinyl ethylamine compds. useful as selective

κ-opioid receptor agonists)

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 473916-34-6P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of hydroxypyrrolidinyl ethylamine compds. useful as selective κ -opioid receptor agonists)

RN 473916-34-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:517323 CAPLUS

DOCUMENT NUMBER: 138:73134

TITLE: Synthesis of the kappa-agonist CJ-15,161 via a palladium-catalyzed cross-coupling reaction

AUTHOR(S): Ghosh, Arun; Sieser, Janice E.; Caron, Stephane;

Watson, Timothy J. 'N.

CORPORATE SOURCE: Chemical Research and Development, Pfizer Global

Research and Development, Groton, CT, 06340-8013, USA

SOURCE: Chemical Communications (Cambridge, United Kingdom)

(2002), (15), 1644-1645

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: LANGUAGE: Journal English

OTHER SOURCE(S):

CASREACT 138:73134

AB Syntheses of CJ-15,161 involving intermol. N-arylation of an appropriately functionalized diamine, obtained from the precursor α-amino acids or, more conveniently, from the corresponding 1,2-amino alcs. via 1,2,3-oxathiazolidine-2,2-dioxide, are reported.

IT 479687-38-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(formylation of; preparation of kappa-agonist compound via palladium-catalyzed

cross-coupling reactions)

RN 479687-38-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 473916-34-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hydrolysis of; preparation of kappa-agonist compound via palladium-catalyzed $\,$

cross-coupling reactions)

RN 473916-34-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(benzoyloxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 204970-97-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

 $(preparation\ of\ kappa-agonist\ compound\ via\ palladium-catalyzed\ cross-coupling$

reactions)

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:178439 CAPLUS

DOCUMENT NUMBER:

134:222619

TITLE:

Preparation of pyrrolidinyl- and

pyrrolinylethylarylamines as kappa opioid receptor

agonists

INVENTOR(S):

Ito, Fumitaka; Kondo, Hiroshi

PATENT ASSIGNEE(S):

Pfizer, Inc., USA

SOURCE:

U.S., 39 pp., Cont.-in-part of Appl. No.

PCT/IB96/00957. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| O.C | | | | | | |
|----------------|---|--|--|--|--|--|
| US 1999-254805 | | | | | | |
| 21 | 19 | 9970821 | | | | |
| LK, LV, | MX, | NO, NZ, | | | | |
| AM, AZ, | BY, | KG, KZ, | | | | |
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| NE, SN, | TD, | TG | | | | |
| 2 | 19 | 9970821 | | | | |
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| 13 | 20 | 0010126 | | | | |
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IT, LU,
NE, SN,
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15 | 21 15 LK, LV, MX, AM, AZ, BY, IT, LU, MC, NE, SN, TD, 2 15 15 20 14 29 20 | | | | |

20010925 B2 US 6294557 В1 20011016 US 2001-770512 20010126 US 6303602 A2 19960918 WO 1996-IB957 PRIORITY APPLN. INFO.: WO 1997-IB1021 W 19970821 JP 1998-514433 A3 19970821 US 1999-254805 A3 19990312

OTHER SOURCE(S): MARPAT 134:222619

GI

$$\begin{array}{c|c} Ar^1 & & \\ & N & & \\ N & & N \\ R1 & & \\ O & & \end{array}$$

Title compds. [I; A = H, halo, OH, alkyl, haloalkyl, alkoxy, haloalkoxy, AΒ O, OY, null; Y = protecting group; broken line = optional double bond; Ar1 = (substituted) Ph; Ar2 = (substituted) Ph, naphththyl, pyridyl, thienyl, furyl, pyrrolyl, pyrimidinyl; R1 = H, OH, alkyl, alkoxy, OY; and R2, R3 = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, Ph, etc.; R2R3N = (substituted) pyrrolidinyl, piperidinyl, morpholinyl], were prepared as κ agonists (no data). Thus, a mixture of 2-(3-(S)methoxymethoxypyrrolidin-1-y1)-1-(S)-phenylethanol, 2-(3-(S)-1)methoxymethoxypyrrolidin-1-y1)-2-(R)-phenylethanol (preparation given), andEt3N in CH2Cl2 was treated with MeSO2Cl at 0° followed by 5,5 h stirring at room temperature to give a residue which was refluxed 1.5 h with Me 4-methylaminobenzoate in EtOH to give 62.5% Me 4-[N-[2-(3 (S)-methoxymethoxypyrrolidin-1-yl)-1-(S)-phenylethyl]-Nmethylamino]benzoate. This was saponified with NaOH in MeOH (quant.) and the acid was stirred with PrNH2 and 1-ethyl-3-(3-dimethylaminopropyl)carbodiim ide hydrochloride in CH2Cl2 to give 72% Me 4-[N-[2-(3-(S)methoxymethoxypyrrolidin-1-yl)-1-(S)-phenylethyl]-N-methylamino]-N'propylbenzamide.

IT 204970-97-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of pyrrolidinyl- and pyrrolinylethylarylamines as kappa opioid receptor agonists)

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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IT
    204970-95-6P 204970-99-0P 204971-01-7P
    204971-03-9P 204971-05-1P 204971-07-3P
    204971-09-5P 204971-11-9P 204971-13-1P
    204971-15-3P 204971-17-5P 204971-19-7P
    204971-21-1P 204971-23-3P 204971-25-5P
    204971-27-7P 204971-29-9P 204971-30-2P
    204971-32-4P 204971-34-6P 204971-36-8P
    204971-38-0P 204971-40-4P 204971-42-6P
    204971-44-8P 204971-46-0P 204971-48-2P
    204971-50-6P 204971-52-8P 204971-54-0P
    204971-56-2P 204971-58-4P 204971-61-9P
    204971-62-0P 204971-64-2P 204971-66-4P
    204971-67-5P 204971-68-6P 204971-69-7P
    204971-70-0P 204971-71-1P 204971-72-2P
    204971-76-6P 204971-77-7P 204971-78-8P
    204971-79-9P 204971-80-2P 204971-82-4P
    204971-83-5P 204971-89-1P 204971-90-4P
    204971-91-5P 204971-92-6P 204971-93-7P
    204971-94-8P 204971-95-9P 204971-96-0P
    204971-97-1P 204972-01-0P 204972-02-1P
    204972-03-2P 204972-07-6P 204972-08-7P
     204972-09-8P 204972-10-1P 204972-11-2P
     204972-12-3P 204972-13-4P 204972-14-5P
     204972-15-6P 204972-16-7P 204972-17-8P
     204972-18-9P 204972-19-0P 204972-20-3P
     204972-21-4P 204972-22-5P 204972-23-6P
     204972-24-7P 204972-25-8P 204972-26-9P
     204972-27-0P 204972-28-1P 204972-29-2P
     204972-30-5P 204972-31-6P 204972-32-7P
     204972-33-8P 204972-34-9P 204972-35-0P
     204972-36-1P 204972-37-2P 204972-38-3P
     204972-39-4P 204972-40-7P 204972-41-8P
     204972-42-9P 204972-43-0P 204972-44-1P
     204972-45-2P 204972-46-3P 204972-47-4P
     204972-48-5P 204972-49-6P 204972-50-9P
     204972-53-2P 204972-54-3P 204972-56-5P
     204972-57-6P 204972-58-7P 204972-59-8P
     204972-60-1P 204972-61-2P 204972-66-7P
     204972-67-8P 204972-68-9P 204972-69-0P
     204972-70-3P 204972-71-4P 204972-72-5P
     204972-73-6P 204972-74-7P 204972-75-8P
     204972-76-9P 204972-77-0P 204973-49-9P
     204973-55-7P 204973-56-8P 204995-07-3P
     329365-40-4P 329365-41-5P 329365-43-7P
     329365-44-8P 329365-45-9P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological

Absolute stereochemistry.

RN 204970-99-0 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 204971-01-7 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-03-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-05-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-07-3 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-09-5 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-11-9 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204971-13-1 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-15-3 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204971-17-5 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-19-7 CAPLUS

CN Benzamide, 4-[methyl[(1S)-1-phenyl-2-[(3S)-3-[(tetrahydro-2H-pyran-2-yl)oxy]-1-pyrrolidinyl]ethyl]amino]-N-pentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-21-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-pentyl- (9CI) (CA INDEX NAME)

RN 204971-23-3 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-pentyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-25-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 204971-27-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-29-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204971-30-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-32-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl- (9CI) (CA INDEX NAME)

RN 204971-34-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-36-8 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-38-0 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204971-40-4 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-42-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 204971-44-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-46-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 204971-48-2 CAPLUS

CN Benzamide, N-methyl-4-[methyl[(1S)-1-phenyl-2-[(3S)-3-[(tetrahydro-2H-pyran-2-yl)oxy]-1-pyrrolidinyl]ethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-50-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-52-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-54-0 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-56-2 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-58-4 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-61-9 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-62-0 CAPLUS

CN Benzamide, 2-methoxy-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-64-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-methoxy-N-propyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-66-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-methoxy-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204971-67-5 CAPLUS

CN Benzamide, 3-methoxy-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-68-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-3-methoxy-N-propyl-(9CI) (CA INDEX NAME)

RN 204971-69-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-3-methoxy-N-propyl-, monohydrochloride (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-70-0 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-71-1 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-72-2 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204971-71-1 CMF C23 H30 C1 N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204971-76-6 CAPLUS
CN Benzamide, 4-[[(1S)-1-[3-(methoxymethoxy)phenyl]-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (Ci INDEX NAME)

RN 204971-77-7 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-hydroxyphenyl)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-78-8 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-hydroxyphenyl)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]ethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN

204971-79-9 CAPLUS Acetic acid, [3-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

204971-80-2 CAPLUS
Acetic acid, [3-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]- (9CI) (CA INDEX NAME) CN

RN 204971-82-4 CAPLUS

CN Benzamide, 4-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-N-propyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-83-5 CAPLUS

CN Benzamide, 4-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-89-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-

N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-90-4 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-chlorophenyl)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-91-5 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-chlorophenyl)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

204971-92-6 CAPLUS RN Benzamide, 4-[(1S)-1-(3-chloropheny1)-2-[(3S)-3-hydroxy-1-CN pyrrolidinyl]ethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME) CM 1 204971-91-5 CRN CMF C23 H30 Cl N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN204971-93-7 CAPLUS CN

Benzamide, 4-[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-94-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-95-9 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-96-0 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-97-1 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-01-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-ethoxy- (9CI) (CA INDEX NAME)

RN 204972-02-1 CAPLUS

CN Benzamide, N-ethoxy-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-03-2 CAPLUS

CN Benzamide, N-ethoxy-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-07-6 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-08-7 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-09-8 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 204972-10-1 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-11-2 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-12-3 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CFINDEX NAME)

HCl

RN 204972-13-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-14-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

RN 204972-15-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2-methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-16-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-17-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl- (9CI) (CA INDEX NAME)

RN 204972-18-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-19-0 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-20-3 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-21-4 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204972-22-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1S)-1-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-23-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1S)-1-methylpropyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 204972-24-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-25-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]-, monohydrochloride (9CI)
(CA INDEX NAME)

HCl

RN 204972-26-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-27-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl- (9CI) (CA INDEX NAME)

RN 204972-28-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-29-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-30-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)- (9CI) (CA INDEX NAME)

RN 204972-31-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-32-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-33-8 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-34-9 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-35-0 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-11-2 CMF C23 H31 N3 O3

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-36-1 CAPLUS

CN Benzamide, 4-[[(1R)-1-[3-(methoxymethoxy)phenyl]-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CAINDEX NAME)

Absolute stereochemistry.

RN 204972-37-2 CAPLUS

CN Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN

204972-38-3 CAPLUS Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-39-4 CAPLUS

Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl]4-CN[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204972-40-7 CAPLUS

CN Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-41-8 CAPLUS

CN Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-42-9 CAPLUS

CN Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-41-8 CMF C23 H30 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-43-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX NAME)

RN 204972-44-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-45-2 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-46-3 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-47-4 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-48-5 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-49-6 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-50-9 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 204972-53-2 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-54-3 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-56-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-57-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-56-5 CMF C23 H30 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-58-7 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-59-8 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-58-7

CMF C23 H29 C1 F N3 O

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-60-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]hydroxyamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-61-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]hydroxyamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-66-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3R)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-67-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3R)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-68-9 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-69-0 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-70-3 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-71-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-72-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-73-6 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]-, monohydrochloride
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-74-7 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2R)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-75-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2R)-2-hydroxypropyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-76-9 CAPLUS

CN Benzamide, 4-[methyl[(1S)-2-(3-oxo-1-pyrrolidinyl)-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

RN

204972-77-0 CAPLUS
Benzamide, 4-[methyl[(1S)-2-(3-oxo-1-pyrrolidinyl)-1-phenylethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

HCl

RN204973-49-9 CAPLUS

Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-CNN-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 204973-55-7 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-(3-methoxyphenyl)ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204973-56-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-(3-methoxyphenyl)ethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204995-07-3 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX

Absolute stereochemistry.

NAME)

RN 329365-40-4 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 329365-41-5 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 329365-43-7 CAPLUS

CN Benzamide, 2-chloro-4-[methyl[(1S)-1-phenyl-2-[(3S)-3-[(tetrahydro-2H-pyran-2-yl)oxy]-1-pyrrolidinyl]ethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

RN 329365-44-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 329365-45-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1S)-1-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1998:199673 CAPLUS

DOCUMENT NUMBER:

128:243949

TITLE:

Preparation of pyrrolidinyl- and pyrrolinylethylamines

as kappa agonists.

INVENTOR(S): Ito, Fumitaka; Kondo, Hiroshi
PATENT ASSIGNEE(S): Pfizer Inc., USA; Pfizer Pharmaceuticals Inc.
SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

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PATENT INFORMATION:

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| | | | | | | _ | | | | | | | | | | | | | |
| WO 9812177 | | | | | A 1 | | 19980326 | | | WO 1997-IB1021 | | | | | 19970821 | | | | |
| | T47 • | זזת | D.C | מם | $C \Lambda$ | CNI | CT | TITT | TT | TC | TD | KD | TI | T 7.7 | MV | MO | 117 | | |

W: AU, BG, BR, CA, CN, CZ, HU, IL, IS, JP, KR, LK, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ,

MD, RU, TJ, TM
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

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IE, SI, LV, FI, RO

IE, SI, LV, FI, RO

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19970821

OTHER SOURCE(S): MARPAT 128:243949

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Title compds. [I; A = null, H, halo, OH, alkyl, haloalkyl, alkoxy, AB haloalkoxy, etc.; dotted line = optional double bond; Ar1 = (substituted) Ph; Ar2 = (substituted) Ph, naphthyl, pyridyl, thienyl, furyl, pyrrolyl, pyrimidinyl; R1 = H, OH, alkyl, alkoxy, etc.; R2, R3 = H, OH, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, Ph, phenylalkyl, etc.; R2R3N = (substituted) pyrrolidinyl, piperidinyl, morpholinyl], were prepared Thus, 2-[3(S)-methoxymethoxypyrrolidin-1-yl]-1(RS)-phenylethanol (preparation given) and Et3N in CH2Cl2 were treated with MeSO2Cl at 0° to give a residue which was refluxed with Me 4-methylaminobenzoate in EtOH to give 62.5% Me 4-[N-[2-[3(S)methoxymethoxypyrrolidin-1-yl]-1(S)-phenylethyl]-N-methylamino]benzoate. This was saponified with 4N NaOH in MeOH (100%) and the resulting acid was stirred with PrNH2 and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH2Cl2 to give 72% 4-[N-[2-[3(S)-methoxymethoxypyrrolidin-1-yl]-1(S)-phenylethyl]-N-methylamino]-N'-propylbenzamide. inhibited acute pain in rats with ED50 <10 mg/kg orally.

IT 204970-95-6P 204970-97-8P 204970-99-0P 204971-01-7P 204971-03-9P 204971-05-1P 204971-07-3P 204971-09-5P 204971-11-9P 204971-13-1P 204971-15-3P 204971-17-5P 204971-19-7P 204971-21-1P 204971-23-3P 204971-25-5P 204971-27-7P 204971-29-9P 204971-30-2P 204971-32-4P 204971-34-6P 204971-36-8P 204971-38-0P 204971-40-4P 204971-42-6P 204971-44-8P 204971-46-0P 204971-48-2P 204971-50-6P 204971-52-8P 204971-54-0P 204971-56-2P 204971-58-4P 204971-60-8P 204971-61-9P 204971-62-0P 204971-64-2P 204971-66-4P 204971-67-5P 204971-68-6P 204971-69-7P 204971-70-0P 204971-71-1P 204971-72-2P 204971-76-6P 204971-77-7P 204971-78-8P 204971-79-9P 204971-80-2P 204971-81-3P 204971-82-4P 204971-83-5P 204971-89-1P 204971-90-4P 204971-91-5P 204971-92-6P 204971-93-7P 204971-94-8P 204971-95-9P 204971-96-0P 204971-97-1P 204972-01-0P 204972-02-1P 204972-03-2P 204972-07-6P 204972-08-7P 204972-09-8P 204972-10-1P 204972-11-2P 204972-12-3P 204972-13-4P 204972-14-5P 204972-15-6P 204972-16-7P 204972-17-8P 204972-18-9P 204972-19-0P 204972-20-3P 204972-21-4P 204972-22-5P 204972-23-6P 204972-24-7P 204972-25-8P 204972-26-9P 204972-27-0P 204972-28-1P 204972-29-2P 204972-30-5P 204972-31-6P 204972-32-7P 204972-33-8P 204972-34-9P 204972-35-0P 204972-36-1P 204972-37-2P 204972-38-3P 204972-39-4P 204972-40-7P 204972-41-8P 204972-42-9P 204972-43-0P 204972-44-1P 204972-45-2P 204972-46-3P 204972-47-4P 204972-48-5P 204972-49-6P 204972-50-9P 204972-53-2P 204972-54-3P 204972-55-4P 204972-56-5P 204972-57-6P 204972-58-7P 204972-59-8P 204972-60-1P 204972-61-2P

Absolute stereochemistry.

RN 204970-97-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 204970-99-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 204971-01-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-03-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl- (9CI) (CA INDEX NAME)

RN 204971-05-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-07-3 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-09-5 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204971-11-9 CAPLUS

CN Benzamide, N-ethyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-13-1 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204971-15-3 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-17-5 CAPLUS

CN Benzamide, N-butyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-19-7 CAPLUS

CN Benzamide, 4-[methyl[(1S)-1-phenyl-2-[(3S)-3-[(tetrahydro-2H-pyran-2-yl)oxy]-1-pyrrolidinyl]ethyl]amino]-N-pentyl- (9CI) (CA INDEX NAME)

RN 204971-21-1 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-pentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-23-3 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1 phenylethyl]methylamino]-N-pentyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204971-25-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-27-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 204971-29-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-30-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-32-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl- (9CI) (CA INDEX NAME)

RN 204971-34-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-36-8 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204971-38-0 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-40-4 CAPLUS

CN Benzamide, N-[(2-chlorophenyl)methyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-42-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 204971-44-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-46-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 204971-48-2 CAPLUS

CN Benzamide, N-methyl-4-[methyl[(1S)-1-phenyl-2-[(3S)-3-[(tetrahydro-2H-pyran-2-yl)oxy]-1-pyrrolidinyl]ethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-50-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-52-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-methyl-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-54-0 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-56-2 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-58-4 CAPLUS

CN Benzamide, 3-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-60-8 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

RN 204971-61-9 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-62-0 CAPLUS

CN Benzamide, 2-methoxy-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-64-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-methoxy-N-propyl-(9CI) (CA INDEX NAME)

RN 204971-66-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-methoxy-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-67-5 CAPLUS

CN Benzamide, 3-methoxy-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-68-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-3-methoxy-N-propyl-(9CI) (CA INDEX NAME)

RN 204971-69-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-3-methoxy-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204971-70-0 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204971-71-1 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-72-2 CAPLUS

CN Benzamide, 3-chloro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204971-71-1

CMF C23 H30 C1 N3 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204971-76-6 CAPLUS

CN Benzamide, 4-[[(1S)-1-[3-(methoxymethoxy)phenyl]-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-77-7 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-hydroxyphenyl)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-78-8 CAPLUS

CN Benzamide, 4-[[(1S)-1-(3-hydroxyphenyl)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]ethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN

204971-79-9 CAPLUS Acetic acid, [3-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

204971-80-2 CAPLUS Acetic acid, [3-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN

204971-81-3 CAPLUS Acetic acid, [3-[2-(3-hydroxy-1-pyrrolidinyl)-1-[methyl[4-CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, monohydrochloride, $[S-(R^*,R^*)]-(9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN204971-82-4 CAPLUS

Benzamide, 4-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-N-propyl-CN(9CI) (CA INDEX NAME)

RN 204971-83-5 CAPLUS

CN Benzamide, 4-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204971-89-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-90-4 CAPLUS

CN Benzamide, 4-[((1S)-1-(3-chlorophenyl)-2-[(3S)-3-(methoxymethoxy)-1-

Absolute stereochemistry.

RN 204971-91-5 CAPLUS
CN Benzamide, 4-[[(1S)-1-(3-chlorophenyl)-2-[(3S)-3-hydroxy-1pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-92-6 CAPLUS
CN Benzamide, 4-[[(1S)-1-(3-chlorophenyl)-2-[(3S)-3-hydroxy-1pyrrolidinyl]ethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1)
(salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204971-91-5
CMF C23 H30 Cl N3 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204971-93-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-94-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl·

RN 204971-95-9 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204971-96-0 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA'INDEX NAME)

RN 204971-97-1 CAPLUS

CN Benzamide, 4-[((1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-01-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-ethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-02-1 CAPLUS

CN Benzamide, N-ethoxy-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-03-2 CAPLUS

CN Benzamide, N-ethoxy-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-07-6 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-08-7 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-09-8 CAPLUS

CN Benzamide, N-(3-hydroxypropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-10-1 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-11-2 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-12-3 CAPLUS

CN Benzamide, N-[(2R)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 204972-13-4 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-14-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-15-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-(2-methylpropyl)-, monohydrochloride (9CI) (CA
INDEX NAME)

● HCl

RN 204972-16-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-17-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl- (9CI) (CA INDEX NAME)

RN 204972-18-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-19-0 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-20-3 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-21-4 CAPLUS

CN Benzamide, N-cyclopropyl-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-22-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1S)-1-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-24-7 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]- (9CI) (CA INDEX NAME)

RN 204972-25-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-26-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(1R)-1-methylpropyl]- (9CI) (CA INDEX NAME)

RN 204972-27-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-28-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-29-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-2-propynyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 204972-30-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-31-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)- (9CI) (CA INDEX NAME)

RN 204972-32-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(3,3,3-trifluoropropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-33-8 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-34-9 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-35-0 CAPLUS

CN Benzamide, N-[(2S)-2-hydroxypropyl]-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-11-2 CMF C23 H31 N3 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-36-1 CAPLUS

CN Benzamide, 4-[[(1R)-1-[3-(methoxymethoxy)phenyl]-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]ethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

204972-37-2 CAPLUS Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

204972-38-3 CAPLUS Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN[(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN

204972-39-4 CAPLUS Acetic acid, [3-[(1R)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-[methyl[4-CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN204972-40-7 CAPLUS

Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME) CN

RN 204972-41-8 CAPLUS

CN Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-42-9 CAPLUS

CN Benzamide, 3-fluoro-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-41-8 CMF C23 H30 F N3 O2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-43-0 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-44-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)-,monohydrochloride (9CI) (CA INDEX NAME)

RN 204972-45-2 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-46-3 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-47-4 CAPLUS

CN Benzamide, N-(1,1-dimethylpropyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CAINDEX NAME)

● HCl

RN 204972-48-5 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-49-6 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]- (9CI) (CA INDEX NAME)

RN 204972-50-9 CAPLUS

CN Benzamide, N-(1,1-dimethylethyl)-4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-53-2 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204972-54-3 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-55-4 CAPLUS

CN Benzamide, 4-[hydroxy[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-54-3 CMF C22 H29 N3 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-56-5 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-57-6 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-56-5 CMF C23 H30 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-58-7 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-59-8 CAPLUS

CN Benzamide, 2-chloro-4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 204972-58-7

CMF C23 H29 C1 F N3 O

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 204972-60-1 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]hydroxyamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-61-2 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]hydroxyamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-66-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3R)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-67-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3R)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204972-68-9 CAPLUS

CN Benzamide, 4-[[(1R)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN204972-69-0 CAPLUS Benzamide, 4-[(1R)-2-[(3S)-3-fluoro-1-pyrrolidinyl]-1-CN

phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX

NAME)

Absolute stereochemistry.

● HCl

204972-70-3 CAPLUS RN

CNBenzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-71-4 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1 phenylethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-72-5 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-73-6 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-[(2S)-2-hydroxypropyl]-, monohydrochloride
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-74-7 CAPLUS
CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-[(2R)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

RN 204972-75-8 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-chloro-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-[(2R)-2-hydroxypropyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 204972-76-9 CAPLUS

CN Benzamide, 4-[methyl[(1S)-2-(3-oxo-1-pyrrolidinyl)-1-phenylethyl]amino]-N-propyl- (9CI) (CA INDEX NAME)

RN 204972-77-0 CAPLUS

CN Benzamide, 4-[methyl[(1S)-2-(3-oxo-1-pyrrolidinyl)-1-phenylethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 204973-49-9 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]amino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 204973-50-2 CAPLUS
CN Benzamide, 4-[[2-[3-(methoxymethoxy)-1-pyrrolidinyl]-1phenylethyl]methylamino]-N-(1-methylpropyl)-, [3S-[1(1R*),3R*]]-[partial](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 204973-55-7 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-(3-methoxyphenyl)ethyl]methylamino]-N-propyl-(9CI) (CA INDEX NAME)

RN204973-56-8 CAPLUS

Benzamide, 4-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-(3-CN methoxyphenyl)ethyl]methylamino]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN

204973-57-9 CAPLUS Acetic acid, [3-[2-[3-(methoxymethoxy)-1-pyrrolidinyl]-1-[methyl]CN [(propylamino)carbonyl]phenyl]amino]ethyl]phenoxy]-, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

RN 204995-07-3 CAPLUS

CN Benzamide, 4-[[(1S)-2-[(3S)-3-(methoxymethoxy)-1-pyrrolidinyl]-1-phenylethyl]methylamino]-N-(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

5

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| | ENTRY | SESSION |
| FULL ESTIMATED COST | 36.38 | 197.92 |
| | | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
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